

## 5.25 Scottish Power utility agreement

### Purpose of Agreement

The purpose of the Agreement is to set out how the diversion of utilities owned by Scottish Power are to be managed during the MUDFA works.

### Current Status of Agreement

The agreement has now been signed by Scottish Power and tie and is with CEC for signature.

### Risk to INFRACO Contract Award

This is a MUDFA related agreement, and as a result it offers insignificant risk to CEC for award of the INFRACO Contract.

## 5.26 DPOFA 2007 Revision

A negotiation was concluded with Transdev to amend the DPOFA signed in 2004. The process is now complete and the principal agreed changes relate to :

- Improved performance bond underpinning both mobilisation and operating obligations
- Alignment with Infraco contract where previous drafting was based on anticipated Infraco terms
- Scope revised to reflect the Phase 1a / 1b configuration from the originally anticipated Lines 1 and 2
- Revisals to KPI performance regime based on up to date commercial view.
- Replacement of original tram revenue incentive mechanism with a reduced cost recharge, reflecting a fully integrated bus and tram system
- Alignment of insurance arrangements under OCIP
- Obtained tram cost synergy savings with introduction of TEL being responsible for transport integration

## 5.27 Mobilisation agreements (Infraco and Tramco)

The pre-close mobilization agreements with Infraco and Tramco are designed to enable works necessary to maintain programme. The agreements are The Advance Works and Mobilisation Contract ("AWM") and Tram Advance Works Contract ("TAW").

The core of the AWM is that Infraco will perform a schedule of works with payment determined by "Agreed Element Estimates" agreed by the parties in respect of each element of work.

The AWM does not overlap with the Infraco Contract because, when the Infraco Contract is entered into, the AWM automatically terminates. The Infraco Contract therefore deals with payment and other terms relating to advance works underway at that time. The TAW works similarly, in that it ends automatically when the Tram Supply Agreement is entered into.

## (6) Land acquisition arrangements

### Purpose of process

The process of assembling land required for the construction and operation of the Edinburgh Tram Network has been managed using a combination of Compulsory Purchase (using the General Vesting Declaration Procedure), and entering into long term lease arrangements with Network Rail and Edinburgh Airport Limited.

### Current Status of Agreement

By financial close, the position in regard to Land available to INFRACO is as follows:

| Nature Of Land    | Land Area (sqm) | Available to INFRACO | Land Take Achieved | Target Date | No Plots |
|-------------------|-----------------|----------------------|--------------------|-------------|----------|
| Pre GVD           | 498             | Yes                  | 0.1%               | Nov-05      | 3        |
| GVD 1&2           | 177467          | Yes                  | 21.0%              | Feb-07      | 43       |
| GVD 3             | 167854          | Yes                  | 19.9%              | Jul-07      | 22       |
| GVD4              | 43323           | Yes                  | 5.1%               | Sep-07      | 19       |
| GVD5              | 2381            | Yes                  | 0.3%               | Dec-07      | 5        |
| GVD6              | 83588           | Yes                  | 9.9%               | Dec-07      | 17       |
| Licences          | 24885           | Yes                  | 2.9%               | Jan-08      | 14       |
| BAA Licence       | 18388           | Yes                  | 2.2%               | Nov-07      | 17       |
| NR APA            | 42480           | Yes                  | 5.0%               | Feb-08      | 37       |
| Forth Ports (S75) | 80293           | Yes                  | 9.5%               | Mar-08      | 51       |
| Adopted Roads     | 202521          | Yes                  | 24.0%              | Achieved    | 78       |
|                   | 843679          |                      | 100.0%             | Total       | 306      |

Of the total land required, 85.5 % is under the control of CEC through ownership or license, a further 9.5% is committed under Forth Ports existing S75 agreement with the balance of 5% subject to the Network Rail APA agreement which has now been signed.

### Land required but outwith Limits of Deviation

In a number of areas, land is required, mostly for temporary access, which is outwith the LoDs laid down in the Acts. These have been reviewed and can be summarised as follows : it is concluded that there is minimal risk of disruption to the programme.

### Works Outside LOD Summary

| Status of Land   | No. | Risk of Access Problem |
|--|-----|------------------------|
| Within Adopted Road (Covered by Roads & Streetworks Act)                   | 131 | Nil                    |
| CEC Owned Land (Covered by CEC/tie Licence)                                | 55  | Nil                    |
| Forth Ports Land (Agreement for tram land transfer as contribution signed) | 15  | Nil                    |
| Covered by signed Licence or Agreement                                     | 19  | Nil                    |
| Licence proposal agreed as yet unsigned *                                  | 2   | Very Low               |
| More design detail required but Low Risk                                   | 12  | Low                    |
|  | 234 |                        |

The asterisk refers to West Craigs and The Gyle licences which are addressed in Section 5. The residual 12 locations have been specifically addressed and it has been concluded that there is minimal risk of disruption to the programme.

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Schedule 31 of the Infraco contract contains drawings which identify the land being made available under the Tram Acts and temporary sites and this has been agreed by BBS.

### 7.1 Governance & delegations

The Governance model deployed to oversee and control the project has evolved as the project itself has moved through different stages of development. Appendix 2 is a detailed paper which was approved by the Boards on 23<sup>rd</sup> January 2008 and which has been updated to reflect the final position as at Financial Close. The paper sets out :

- 1) the proposed governance model for the construction period ; and
- 2) the proposed levels of delegated authority

The paper is an update of previous submissions to the Boards and differs only in two material respects – the inclusion of specific levels of delegated authority and alignment with the terms of the tie and TEL Operating Agreements (see below). Neither of these factors should cause concern : the levels of delegated authority are in line with those previously deployed by the TPB and the terms of the operating agreements have been subject to significant scrutiny by senior people over recent months.

### 7.2 Operating agreements

These agreements are now in final agreed form.

#### tie

The tie agreement was previously reviewed by the tie Board in December 2007 and the changes since then are in line with the request made by the tie Board. The tie agreement supercedes the existing agreement on matters relating to the tram project and sets out tie and the Council's mutual responsibilities for delivering the tram project.

#### TEL

The TEL agreement reflects TEL's role but the detailed wording is consistent with the tie agreement. The TEL agreement sets out the specific authority delegated to it by the Council with acknowledgement that TEL will sub-delegate its authority to the TPB.

These internal agreements have been settled, where possible, taking account of DLA Piper's advice to tie and CEC in relation to (i) their acceptability as evidence of agency authority to transact and (ii) their potential adverse impact on the project's strategy towards competition law.

### 7.3 Taxation

Advice has been taken from PwC on two principle areas :

- 1) The tax effect of the Infraco contract suite structure ; and
- 2) The VAT status of the grant funding

The main objective in tax planning has been to ensure that the arrangements were VAT neutral such that there would be no irrecoverable input VAT and that no unforeseen output VAT would require to be accounted for. We have a formal report from PwC addressed to tie, CEC and TEL confirming this. We have also engaged with HMRC and have a clearance letter from them confirming that the objective is achieved. The contract structure has also been assessed by PwC to ensure that it will be possible in due course to establish a cost base in TEL by either selling or leasing system assets owned by CEC which will create corporation tax shelter in TEL. This could prove very valuable over the operating period of the integrated system.

## (8 ) Risk assessment of in-process and provisional arrangements

*This section contributed by Stewart McGarrity, who reviewed those areas of the documents which are provisional in nature and the documents which will be in draft form at Close.*

THE MATERIAL IN THIS SECTION IS COMMERCIALY CONFIDENTIAL AND FOISA EXEMPT.

Additional to the analysis provided in this section is the effect of the final round of negotiations instigated by Bilfinger Berger. The detail behind the final position reached has been documented separately for CEC.

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### 8.1 Overview

tie's approach to identifying and managing risks was fully explained in the Final Business Case. This section reviews the current status of the risks relating to the Infraco and Tramco contracts which have been identified as wholly or partly retained by the public sector beyond Financial Close which are:

- The process for granting of approvals and consents;
- The process for granting of permanent TRO's
- The interface with the implementation of utility diversion works
- Delays to design approvals for reasons outside the control of the Infraco
- Stakeholder instructed design changes

Specific areas covered are:

- Price certainty achieved through the Infraco and Tramco contracts with a view on items included in the contract price which will remain provisional at Financial Close
- Specific exclusions from the Infraco contract price
- Responsibility for consents and approvals

And as an area of particular concern to stakeholders:

- The risks associated with significant 3<sup>rd</sup> Party Agreements not concluded in full at Financial Close.

### 8.2 Price certainty achieved

The Tramco price agreed at £55m is a fixed sum in pounds sterling for the supply of trams. The overall capital costs estimate for Tramco also includes fixed sums totalling £3.0m for mobilisation costs associated with the maintenance contract and items of equipment for the depot which will be paid prior to the commencement of operations.

The Infraco price of £233.5mm comprises

- £227.0m of firm costs
- less £12.9m of Value Engineering initiatives taken into the price with the agreement of BBS but with qualifications attached
- plus £19.4m of items which remain provisional at Financial Close.

A thorough risk appraisal has been carried out on the deliverability of the Value Engineering initiatives with reference to the qualifications which attach to them. As a result a prudent allowance of £4m has been made against the possibility that for certain items these qualifications will not be removed (of which £2m has been included in the base cost estimate for Infraco and £2m has been included in the overall risk Allowance for the project).

Provisional items comprise a defined list of 22 items each with a clear process for and programme for resolution. The estimate for each item has been reviewed by tie's technical consultants and by BBS and the risk of understatement is considered to be low. The most significant items are a £6.3m allowance for civil works, including utilities, at Picardy Place as the design for the approved layout is not yet complete. (the cost of the actual tramway, tram stop and associated works at Picardy Place are included in the firm element of the price) ; £3.1m in respect of works which may be carried out on behalf of 3<sup>rd</sup> parties (eg Forth Ports) and which are recoverable from those third parties and a £5.0m allowance for Urban Traffic Control works (traffic lights) associated with the implementation of the project.

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The overall capital cost estimate for Infraco includes a further £5.0m, comprising £2.6m for maintenance mobilisation (as for Tramco), and £1m for major spare parts based upon a schedule of prices provided by Infraco and a £1.0m provision for known design changes at the Airport tram stop yet to be included in the Infraco price and £1.4m for other items for which the status or procurement method are yet to be finalised.

### ***8.3 Infraco price basis and exclusions***

The Infraco price is based upon the Employers Requirements which have been in turn subject to thorough quality assurance and the significant areas where post contract alignment of the SDS design will be required. Crucially the price includes for normal design development (through to the completion of the consents and approvals process – see below) meaning the evolution of design to construction stage and excluding changes if design principle shape form and outline specification as per the Employers Requirements. The responsibility for consents and approvals is further considered below.

Significant exclusions from the Infraco price are items not included in the Employers Requirements in respect of (responsibility for securing incremental sources of funding in brackets):

- Additional works at Picardy Place, London Road and York place (CEC)
- Additional works at Bernard Street (CEC)
- Full footway reconstruction in Leith Walk (CEC)
- Additional works in St Andrew Square outwith the tram alignment (CEC)
- Changes within the Forth Ports area (Forth Ports)
- Any other scope required by third parties not already included in the Employers Requirements by virtue of a commitment in an existing agreement

Note that the main works for Picardy Place are included in Infraco as a Provisional Sum.

Full details of all significant such matters have been summarised and reported to CEC. In particular, the cost of tapered OLE poles in the City Centre and Waterfront areas has been provided in the fixed cost.

### ***8.4 Responsibility for consents and approvals***

As previously tie/CEC will retain the risk associated with the process of obtaining TROs and TTROs (some for TTROs post-Service Commencement which are Infraco's responsibility). Full provision has been made in the Risk Allowance for the possible costs associated with a legal challenge to the TRO process which it is not anticipated will include a formal public hearing.

As fully detailed in Appendix 1, for all other required consents and approvals (either design or construction related) the principles which apply are:

1. Infraco (including SDS) will bear any costs and programme consequences associated with design quality and constructability for all consented and/or approved design.

2. in respect of consents and approvals outstanding at Financial Close, tie/CEC will bear any incremental construction programme cost consequences of SDS failure to deliver design outputs in a timely and sufficient manner to the consenting or approving authority insofar as the cost is not recoverable by Infraco from SDS under a capped liquidated damages provision or can otherwise be mitigated by the Infraco.
3. tie/CEC will bear the incremental cost and programme consequences associated with a delay in granting consents or approval having received the required information in a timely and sufficient manner and/or the cost and programme consequences of changes to design principle shape form and outline specification (as per the Employers Requirements) required to obtain the consent or approval.

Taking due cognisance of all mitigations described in Appendix 1, the Risk Allowance (see 8.6 below) includes provisions totalling £3.3m for delays associated with outstanding design work at Financial Close in addition to a £6.7m provision for general programme delay.

To clearly delineate responsibility and therefore risk allocation the Infraco contract and associated schedules, including the SDS Novation Agreement, clearly defines in detail and in a manner agreed by Infraco, SDS and tie/CEC:

- The necessary consents and approvals already obtained at Financial Close
- The remaining consents and approvals and whether the information to obtain such rests with Infraco or SDS
- The expectations with regard to quality of information including compliance with relevant law and regulation
- The programmed dates for delivering information and obtaining the necessary consents and approvals consistent with achieving the overall programme for the project

The role of tie in this complex process is to carefully manage the programme of delivery and take mitigating action as necessary to avoid any cost or programme implications from slippage on individual items. tie also retains responsibility for obtaining specific items including obtaining NR possessions which align with the construction programme agreed with Infraco.

The Risk Allowance does not provide for the cost or programme consequences associated with a wholesale failure of this process – see QRA alignment & Risk Allowance below.

### ***8.5 3<sup>rd</sup> Party Agreements***

There are three groups of residual third party related risks :

- EAL – there is a legal matter to resolve around a future redevelopment of the Airport terminus area. This issue and some contract alignment issues are described in the DLA Report and are not anticipated to create any material risk. .
- NR – a number of mostly programme related risks arising from the NR agreements which are in the normal course of business for doing business with NR. The QRA covers for these in the general delay provision
- Forth Ports - risk that the contribution to extra construction costs of their revised design requirements as capped in their agreement proves to be insufficient to cover the costs. However, tie is comfortable that there will be no material overrun and that the underlying design is sufficiently clear to both parties that future dispute risk is minimal. In the final analysis, resort can be had to imposition of the original design to force an acceptable result.

tie's risk identification and management procedures as detailed in the FBC describe a process whereby risks associated with the project which have not been transferred to the private sector are logged in the project Risk Register. Where possible the cost of these risks is quantified by a QRA in terms of a range of possible outcomes, probability of occurrence and thereby the Risk Allowance which is included in the capital cost estimate for the project. The project Risk Register also details the "treatment plans" being followed to mitigate individual risks and thereby avoid all or part of the cost allowance.

As the Infraco and Tramco procurements have progressed tie has maintained and reviewed contractual Risk Allocation Matrices, which reflect the risks retained by the public sector arising from the contracts, and has exercised prudence in ensuring the Risk Register, QRA and therefore Risk allowance provide adequately for risks retained for the public sector including the major areas or risk assessed above.

The only material change in the Risk Allocation Matrices between Preferred Bidder stage and the position at Financial Close is in respect of the construction programme costs associated with any delay by SDS in delivery of remaining design submissions into the consents and approvals process beyond Financial Close.

The Project Control Budget at Financial Close totals £508m (Final Business Case £498m) including a risk allowance of £32m (Final Business Case £49m). This change primarily reflects the closure of procurement stage risks on Infraco and Tramco including all the risks associated with achieving price certainty and risk transfer to the private sector as has been effectively achieved in the Infraco contract as summarised above.

The risk allowance of £32m includes the following provisions for residual risks retained by the public sector during the construction phase of Infraco and Tramco.

- £8.8m in respect of specifically identified risks held by and to be managed by tie during the construction phase including adverse ground conditions, unidentified utilities and the interface with non-tram works and post close alignment of the Infraco proposals with the SDS design.
- £2m in respect of the risk that conditions attaching to the VE items taken into the Infraco price may not be removed
- £3.3m in respect of post Financial Close consents and approvals risks which provides for the cost or programme consequences of imperfections which may arise in elements of the consents and approval risk transfer as described above.
- £6.6m to provide for the cost of minor Infraco / Tramco programme slippage of up to 3 months (other than as a result of delays to MUDFA which is provided for elsewhere in the risk allowance).

tie has assessed these amounts as providing adequately for the residual risk retained by the public sector arising from the Infraco and Tramco works and the post Financial Close consents and approvals process. However the Risk Allowance does not provide for the costs of:

- Significant changes in scope from that defined in the Employers Requirements – whether such changes were to emerge from the consents and approvals process or otherwise
- Significant delays to the programme as a result of the consenting or approving authorities failing to adhere to the agreed programme (Infraco/SDS having met their own obligations) or any other tie/CEC initiated amendment to the construction programme which forms part of the Infraco contract.

All other things being equal any such changes falling into these categories would give rise to an increase in the cost estimate for Phase 1a of the project above of £508m.

## 8.7 Value Engineering Opportunities

As explained at 10.2 above, the Infraco price is stated after deducting VE opportunities with an aggregate value of £13.8m subject to satisfying certain conditions including the approvability certain items through the consents and approvals proves. A total of £4m have been provided against the possibility that such conditions will not be satisfied. Value Engineering is a continuing process during construction and tie continue to seek to present value for money opportunities to save on construction and project management costs.

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## 8.8 Alignment of QRA and Risk Allowance to DLA Letter and Risk Matrices

tie has considered the DLA Report and appended risk allocation matrices and considers that the Risk Allowance of £32m contained in the projected Control Budget at Financial Close and associated QRA adequately reflects the risks identified and the change in such risks retained by the public sector since approval of the FBC in December 2007. The following references are to specific paragraphs/sections in the DLA letter:

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### 5.1 Employers Requirements (ERs) – Alignment issues

There is a well understood and limited level of uncertainty with regard to the alignment of the ERs, the SDS design and the Infraco proposals (on which their price is based). The alignment work described at Section 2.3 above resulted in limited amendment to cost and risk contingencies.

### 5.2 Project Master Programme

The Project Master Programme which forms part of the Infraco contract is now agreed in all material respects. The QRA provides an amount of £6.6m (equivalent to 2-3 months complete delay in the programme) for general delay risk which has been assessed by tie management as adequate for the management of the programme but will not provide for any significant stakeholder initiated change beyond the point of Financial Close. The risk allowance accommodates tie's assessment of the anticipated immediate contractual variation which flows from the final integration of SDS design and construction programmes.

### 6.4 EAL – Option to shift tramway post 1/1/13

The capital cost of any shift in the Tramway at the airport beyond 1/1/13 would be at the expense of BAA and is not therefore a risk which should be provided for in the Phase 1a budget.

### 7.1 Consents – Delay on post-close consents

This is the one significant change in the risk profile retained by the public sector since December 2007. The exact nature of tie/CEC's continuing risks have been well rehearsed and are detailed in Appendix 1 as are the mitigating actions and processes tie has in place to manage these risks. A risk assessment in relation to the QRA is provided at section 8.4 above.

The total risk allowance provided in the QRA in respect of continuing Consents and Approvals Risk is £3.3m. This equates to the cost of some 3 months of BBS standing time and is considered adequate by tie management in the context of the number and criticality of consents still to be delivered, the liquidated damages available to BBS from SDS in the event the delay is caused by SDS, the responsibility of BBS to mitigate the costs of any delay and the close management of the process beyond Financial Close by tie. The risks summarised in the DLA Report are therefore accommodated in the risk and contingency allowance to an acceptable degree. The £6.6m provision noted in section 5.2 above deals with the entire programme moving out by 2-3 months. The £3.3m deals with BBS costs for standing time and other prolongation costs.



### 9.1 Design due diligence

The process and procedures laid out in the design management plan and design assurance process formal design reviews have been undertaken every week since September 2007 to inform and finalise the detailed design submissions. These submissions are then consolidated to form the necessary technical and prior approval packages for CEC to discharge their statutory obligations.

In parallel with the process since August 2007, BBS have had access to the detailed design submission across the range of asset for the Edinburgh Tram Network to enable Infraco's design due diligence to be undertaken. Appendix 1 sets out the status of the design process as at Financial close.

### 9.2 Run-time due diligence

The Infraco contractor has undertaken modelling based on the updated data provided by SDS and CAF to accept the "laws of physics" runtime as part of the finalised Employer's Requirements.

### 9.3 TTRO / TRO process

The process for gaining the TRO's for the project is documented in the TRO strategy produced in 2007. A major risk in this respect was removed when the Scottish Government amended the TRO Regulations to remove the need for a mandatory hearing for Tram TRO's. CEC can still elect to hold a hearing if they consider the level of objection to any particular TRO merits such action.

Completion of the TRO's is now driven entirely by design and modelling works being undertaken by SDS and JRC and managed closely by tie. The programme identifies the Orders being made in early 2010 which is in line with the overall construction programme.

### 9.4 MUDFA including interface with INFRACO programme

The Multi Utilities Diversion Framework Agreement [MUDFA] is currently being progressed to Programme Revision 06 as agreed in November 2007.

This programme has been utilised to integrate with the INFRACO programme and is identified as a constraint in a number of construction items. This has been reflected in the INFRACO Construction Programme with the agreement of BBS and other principal stakeholders as part of the sign up to overall construction methodology. Specific elements of diversions have been transferred to INFRACO where it is required by construction sequencing for the final utilities works.

It is expected that, despite detailed subdivision of works to facilitate BT cabling and commissioning, there will remain some overlapping of work sections as INFRACO commences. It is likely to be restricted to section 1C and 1B and can be managed with INFRACO, BT, AMIS and tie.

Regular reviews of MUDFA progress will be taken with stakeholders to ensure no conflict with Infraco works.

Overall progress on the utilities works has been good in terms of adherence to budget (with no contingency drawdown to date) and to programme. In addition, the public communications process has worked well although it is fully acknowledged that there is a long way to go.

### 9.5 Management team and Handover

The Tram Project Team to manage the construction phase of the project has now been designed and is substantially populated. Interim arrangements are in place for all key posts where a permanent appointment is awaited. Handover arrangements and detailed documentation of the final contract terms are underway and key procurement phase staff are contracted to remain until this handover is successfully completed.

The Infraco Director and team have commenced detailed works from February 2008 and are already managing and monitoring the Mobilisation Agreements with BBS and CAF. In addition, 3<sup>rd</sup> party facilitation arrangements have been commissioned to accelerate the forming of effective working relationships between BBS and tie.

#### 9.6 Safety

Safety management systems are in place. The governance paper at Appendix 3 sets out the overall approach being taken by tie in collaboration with the contractors and stakeholders. Safety management will be under the specific oversight of a tie Board committee chaired by one of the tie non-executive directors who is an experienced industry professional.

#### 9.7 Commercial Management

tie have appointed their post-contract award Commercial Director, who commenced work on 7 January 2008. He is currently progressing the remaining recruitment to ensure a competent, fully populated commercial team is in place to manage the INFRACO contract (including novated contracts for SDS & TRAMCO) immediately on Financial Close. Updated commercial processes and procedures have also been established.

#### 9.8 Insurance

The project insurance arrangements have been in place for some time under the Owner Controlled Insurance Programme (OCIP) implemented with advice and direction from Heath Lambert. The programme has also been subject to evaluation by the Infraco consortium.

#### 9.9 Risk Management

tie's risk identification and management procedures as detailed in the FBC describe a process whereby risks associated with the project which have not been transferred to the private sector are logged in the project Risk Register. Where possible the cost of these risks is quantified by a QRA in terms of a range of possible outcomes, probability of occurrence and thereby the Risk Allowance which is included in the capital cost estimate for the project.

The project Risk Register also details the "treatment plans" being followed to mitigate individual risks and thereby avoid all or part of the cost allowance. There is an agreed risk management procedure currently in operation to manage and treat risks which is owned by tie's risk manager and subject to detailed scrutiny each period with the individual project managers at the period Project Director's Review.

tie and CEC have also agreed an interface to the project where a filter and review is applied to any risks raised by CEC which may be considered relevant as a project risk and requiring a necessary treatment plan.

tie are focused on managing the delivery risks and associated treatment and mitigation plans to avoid or minimise any cost, quality or programme implications.

## (10) Specific confirmations

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On the basis of the content of this report, the DLA Report and supporting documentation, it is considered that :

- The Infraco Contract Suite is in terms acceptable for commitment ; and in particular
  - The Tramco Novation Agreement is in terms acceptable for commitment
  - The SDS Novation Agreement is in terms acceptable for commitment
- The CEC Financial Guarantee is in terms acceptable for commitment and is aligned in all material respects with the Infraco Contract Suite
- The tie Operating Agreement is in terms acceptable for commitment
- The TEL Operating Agreement is in terms acceptable for commitment

## Background

Negotiations have taken place over a lengthy period of time with the objective of defining a process and set of contractual terms which will enable tie and CEC to manage the risks arising from the overlapping design and construction periods. This problem was not anticipated when the SDS contract was concluded in 2005. The recent discussions have taken place under the umbrella of the SDS Novation Agreement, but it is important to distinguish two groups of issues:

**Cost certainty** : The primary objective of the novation approach was to ensure that design work could commence long before commitment to the construction contract suite generating maximum construction price certainty and transferring design risk to the construction partner.

**Outstanding design risk** : SDS have resisted accepting liability to BBS for the timeliness of submission and approval of design packages after Financial Close. Their concern is that the risk is different from (and incremental to) the underlying risk arising from the quality of their work. A delay, they argue, could result in hefty exposure because of the linkage to construction programme delay. SDS did not anticipate this risk when committing to their contract - the expectation was that the majority of design scope and certainly all approvals would be complete prior to Financial Close.

The packages which have been delivered to BBS, with the requisite approvals, by Financial Close (“Approved Packages”) are subject to the Novation terms, which inter alia result in BBS accepting the design quality risk, with resort to SDS in the event of failure under the terms of the existing SDS agreement. The exposure to SDS could be potentially onerous, but was accepted when they entered into the existing contract and is not currently contentious.

This means that the primary objective above of cost certainty and risk transfer has been achieved relative to Approved Packages.

The problem relates to design packages which as at Financial Close are either :

- Submitted for Prior / Technical Approval but not yet approved (“Submitted Packages”); or
- Work in progress and not yet submitted (“Outstanding Packages”).

The rest of this paper provides an analysis of the residual risk to tie / CEC arising from these two groups of design packages. The paper does not address so-called “tie Consents” – TROs, TTROs and consents relating to statutory authority to implement the scheme - which have been accepted as out with the responsibility of SDS and BBS, except that BBS (and through them SDS) have an agreed contractual responsibility to assist in the process.

## Risk overview

The risks which arise from the overlap of design and construction periods are summarised below :

- A. The Submitted packages are not of requisite standard, preventing CEC from providing consent timeously and creating delay to the construction programme.
- B. The Submitted packages are of requisite standard, but CEC fail to provide consent timeously, creating delay to the construction programme.
- C. SDS fail to provide the Outstanding packages on a timely basis relative to the agreed programme, preventing CEC from providing consent timeously and creating delay to the construction programme.
- D. SDS fail to provide the Outstanding packages to the requisite standard, requiring rework and delay, preventing CEC from providing consent timeously and creating delay to the construction programme.
- E. CEC provide consents and approvals timeously, but SDS then fails to provide IFC ("Issued For Construction") drawings to BBS timeously creating delay to the construction programme.
- F. SDS provide the Outstanding packages on time and to the requisite standard, but CEC fail to provide consent timeously, creating delay to the construction programme.

It is not anticipated that the final Outstanding Packages will be delivered until Autumn 2008. The option of delaying Financial Close to eliminate the risk is therefore unattractive.

SDS has resisted accepting any liability in the event of any of these scenarios. Since the point of investing in a procurement of a design appointment in Autumn 2005 was to secure a completed approvals process with an advanced network design development, there was no allowance for the implications of a coincident design and construction process in the existing SDS agreement. Accordingly, tie / CEC's leverage over SDS on the issue is limited.

BBS have similarly resisted accepting any liability for the consequences of delay arising from the Submitted or Outstanding packages. Their position was reserved (as was Tramlines' position) at preferred bidder, pending due diligence on SDS, as they were aware of the issue at the Preferred Bidder stage, but again we have only limited sanction over them.

There has been no sustained attempt by BBS to sidestep the transfer of design quality risk once the Submitted and Outstanding packages are eventually signed over to them with consent. In fact they have now explicitly accepted the design quality risk as part of the Agreement made on Friday 7 March for Contract Price adjustment. Accordingly, the remaining risk is focussed on construction programme delay as a result of late delivery of design and hence IFC drawings impacting construction.

Resolving this issue has been made more difficult because of concern built up over a long period about the quality and timeliness of SDS's work on the part of tie, CEC and BBS. There is also a concern that performance against the agreed submission programme could be obfuscated with the intent (or at least result) that design packages fall outwith BBS / SDS responsibility because of claimed failure by CEC. This could happen in four ways:

1. Confusion about submission date if a package is returned by CEC for quality improvement
2. Swamping CEC with a high volume of design packages which cannot be processed within the 8-week period
3. BBS and SDS by some means acting in concert to subvert the process
4. Lack of clarity about the quality of submissions

In summary therefore, tie / CEC are exposed to risks relating to timeliness of submission and / or quality. The risk could be heightened by deliberate or inadvertent actions by BBS / SDS. The next section describes the primary means by which these risks can be contained, through an effective management process controlled by tie / CEC.

## Development of the design submission and approval management process

### Recent process improvements

The process of managing SDS has not been smooth. The performance of SDS has been consistently disappointing on a number of levels and it is fair to say that weaknesses have also existed in execution by tie and CEC.

More recently, building on the existing Tram and Roads Design Working Groups, a number of important initiatives have been implemented to improve all-round performance. These have together improved both the rate of design production and the quality of those designs.

#### (1) Co-location of staff

The co-location of tie, CEC and SDS staff in Citypoint shortened lines of communication and promoted a healthy working relationship that has led to quicker resolution of issues. This has been strengthened further by location of SDS approvals team in Citypoint.

#### (2) Improved contract management arrangements

tie has increased the number and calibre of resource devoted to managing the design contract, strengthening both its capability to deal with engineering issues and to manage the overall relationship including commercial management and issues resolution.

#### (3) Focus on resolution of outstanding design issues

By instituting the weekly critical issues meeting with attendance from tie, CEC and SDS aimed at clearing critical issues so that they did not hold up design production, tie brought together the relevant individuals, assigned clear responsibility for securing resolution and monitored progress. In recent weeks that has resolved almost all issues that are holding up SDS design and allowed a number of designs that were almost complete to take the critical final step to full completion and submission for approval. This has now evolved to weekly meetings chaired by the tie Executive Chairman to ensure rapid resolution as design progresses to and through the approval process.

Actions from this meeting are carried out by a joint CEC, tie, SDS task force.

#### (4) Closing out third party agreements

Many of the outstanding design issues involved reaching final agreement with third parties. Although steady progress had been made with many third parties a small number of third party negotiations were not moving to a satisfactory conclusion. tie devoted additional resources to closing out these issues and worked closely with CEC and SDS to ensure final agreements were reached.

#### Documentation of process and execution

The management process is captured in the Design Management Plan (“DMP”) This, along with the review procedure forms Schedule 14 of the Infraco Contract. In recent months, SDS has had much greater clarity over the reasonable expectations of the approvals bodies. All of SDS’s design packages are clearly defined. A programme has been agreed for the submission of each and the quality of information to be provided with the submissions has been defined. In this context, “quality” relates to an objective assessment of the fitness for purpose of the package, not a subjective assessment of the aesthetic character of the content. A well-defined process of informal consultation prior to submission with relevant CEC people is in effective operation. Once submitted, CEC have an agreed period of 8 weeks to deliver Prior and / or Technical Approval as necessary (“consent”) for each package.

Following novation of SDS to Infraco at Financial Close, tie will continue to use the DMP, working with CEC and InfraCo, to manage the design and consent process and maintain the improved performance in design production and approval. The DMP has been updated to incorporate the role of Infraco in managing SDS following novation but the key principles and initiatives remain in place. This process will be applied to complete the consent process for Submitted and Outstanding Packages as defined above.

Arrangements have been agreed with BBS, SDS and CEC to ensure that all key individuals and constituencies are working very closely together.

CEC’s involvement in the approvals task force, ensures that there is timely and effective feedback from the approval body of progress with Submitted Packages. It also allows CEC to raise any issues that need to be resolved before a submission can be made.

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Whilst some of the Outstanding Packages lie on the critical path for construction, many do not. This means that there is still some flexibility in the agreed approvals programme. Management of that flexibility lies with tie and CEC and BBS/SDS can only take advantage of the flexibility with tie’s consent.

There will be some changes to the design that SDS submits/has already submitted. Mainly these are necessary refinement of the detail of items where the detailed design will be completed by BBS and these have been allowed for within the programme. Where BBS is proposing an alternative design to that already submitted by SDS, BBS will be responsible for securing approval of that alternative design. In these cases BBS will draw on the experience of SDS to manage that consultation and approval programme.

## Contractual underpinning

The contractual terms which capture these arrangements reflect:

- The contractual responsibility for managing SDS design and development work supporting Submitted and Outstanding Packages sits with BBS;
- BBS are contractually obliged to follow the regime under the Review Process and Design Management Plan, as are SDS;
- SDS agree to liquidated damages to be applied by Infracore regarding late or deficient submissions to CEC;
- Contractual clarity as to primary responsibility for categories of Consents
- Excusable delay in failure to obtain CEC Consent entails evidence of full compliance by SDS/BBS with agreed regime: timing, sequence, quality, notification;
- The absolute nature of SDS contractual responsibility to obtain all Consents has been adjusted to reduce tension surrounding interface with CEC;
- The risk of prolongation cost as a result of SDS failings in terms of causing delay (through not obtaining Consent) is to be taken by tie.
- the risk to programme (and generally) of SDS consented design containing a quality deficiency is ultimately taken by SDS and, in the first instance, by BBS. BBS have now explicitly accepted this as part of the Contract Price. tie will hold a collateral warranty from SDS.

Finally and critically, the overall programme for consents is not only embedded in the SDS Novation agreement to which SDS and BBS are parties, but the programme has been interfaced in detail with the construction programme.

In summary, there is confidence among the tie and CEC managers involved that the management process can be executed rigorously after Financial Close.

## Focussed risk analysis

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In addition to executing effective management control across all design packages, it is useful to identify those packages which carry the greatest risk. This facilitates prioritisation and mitigation action and also creates a clearer view of the residual risk arising from the overlapping design consent and construction programmes.

On 15<sup>th</sup> February 2008, CEC and tie jointly reviewed the status and risk profile of every Submitted and Outstanding Package relating to Phase 1a, allowing for anticipated progress to Financial Close. The review has been updated through the period to Financial Close, allowing a fresh assessment of risk at both point of Notification of Award and at Financial Close.

The best estimate of progress by end-April will be that 8 Prior Approvals and 7 Technical approvals will have been achieved, making a total of 15 Approved Packages.

The review of the Submitted and Outstanding Packages assessed for each design package seeking Prior and / or Technical Approval :

1. The risk arising from the criticality of the package relative to the construction programme ; and



2. The risk arising from the quality and complexity of the package, which could affect timely consent

A graduated risk measurement was applied to each package for each of the two risk criteria : those packages which were required for the earliest stages of the construction programme having a higher risk rating than those required for later stages ; and more complex or sensitive packages or those with known quality issues were given a higher risk rating than those of a simpler character. The two risk ratings were multiplied together to give a risk rating tabulation across the whole population of Submitted and Outstanding Packages. The tabulation was then stratified into Critical, High, Medium and Low categories based on the risk ratings.

The people who contributed to this process and who have confirmed they are comfortable that the results are properly presented were Susan Clark (tie Programme Director), Andy Conway (CEC Tram Coordinator), Damian Sharp (tie Design Project Manager i/c of the SDS design and approval process), Tom Hickman (tie Programme Manager) and Mark Hamill (tie Risk Manager).

87 individual packages were reviewed, of which 82 were assessed as medium or low risk. The remaining 5 packages in each category were :

| Submitted Packages   | Critical | High |
|----------------------|----------|------|
| Prior Approval       | 0        | 0    |
| Technical Approval   | 0        | 0    |
| Outstanding Packages | Critical | High |
| Prior Approval       | 1        | 2    |
| Technical Approval   | 1        | 1    |

Appendix 1 lists these Critical and High risk packages with a brief summary of their risk profile and the mitigating factors which can be deployed to manage the risk

A report is available which provides a detailed breakdown of the entire population of 87 packages. For each package, the issue is well understood and mitigation plans have been identified to ensure that the risk is being managed on an ongoing basis. Appendix 1 contains full details of these.

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In overall terms, the limited number of Critical / High risk packages is no surprise given the short anticipated time to finalise the consent process relative to the overall construction programme and the extent of work done to date to meet the needs of the approval authority.

### Third party approval risk

In addition to approvals by CEC a number of the Submitted and Outstanding Packages also require approval by third parties. The most frequent and significant third party approval body is Network Rail. There has been substantial informal consultation with Network Rail throughout the development of the design and Network Rail has expressed satisfaction with many of the designs in principle. Network Rail has agreed to review Submitted Packages for technical approval in parallel with the CEC consideration of those packages. This means that Network Rail will be in a position to confirm approval very soon after CEC approval is granted. This is a significant concession by Network Rail and reflects their confidence in the design following the consultation to date.

The other significant third party in this context is BAA. Within the EAL Licence, Schedule 3 allows EAL to review tram works data – primarily design & construction related method statements. There is a 30 day review period, and EAL could object to this data, but only on the basis of adverse impact on airport operations or safety. There is also a DRP set out in the licence if an agreed position on design change (both acting reasonably) cannot be resolved.

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We are taking EAL through the design and the MUDFA works in a scheduled process of meetings (held 4 weekly, but also in the case of MUDFA, more regularly), there is nothing to suggest that the risk of designs not being accepted is low.

Forth Ports is another player, but the agreement scheduled to be signed with them, and the generally constructive working relationship on these issues, creates a good level of comfort.

No serious issues are anticipated with the other third parties, with whom the approval process is fairly commonplace. Overall, it is considered that the third party arrangements create no material risk to the construction programme.

### Higher-level mitigations

In addition to the mitigation arising from control of the well-defined management and approval process and the limited number of Critical / High risk locations, there are a number of higher-level mitigations which are relevant to the overall evaluation.

#### SDS Liability

In relation to the Submitted and Approved Packages, one contractual feature of importance in assessing the overall risk is the reward / penalty mechanisms to be applied to keep the design process on track after Financial Close. These mechanisms relate to what can reasonably be defined as SDS's performance. SDS will however accept no liability arising from CEC delay (risks B and F above). The effect of these arrangements has been incorporated into the assessment of risk contingency described below.

A general legal protection exists whereby SDS is exposed to claims from BBS following novation for "culpable failure" which could supersede the cap.

#### Funding support

Any uncapped exposure will carry no financial protection to tie / CEC. However, should this result in increased project cost, assuming legitimately incurred, the terms of the grant funding from Transport Scotland mean that the cost will be substantially covered by grant, to the extent that there remains headroom beneath the aggregate funding of £545m. It must be borne in mind that this factor cushions risk to tie / CEC but not to the project as a whole.

#### Existing risk contingency

The project cost contains risk contingency amounting to £3.3m linked to the consent risks described in this paper.

## Conclusion

The overlap of continuing design and approval processes with the construction programme has created a risk. Experience in the early years of managing the design and approval process was not happy, but recent initiatives have successfully developed a well-defined and effective management process, led and directed by tie / CEC. This management process will continue following Financial Close with minimum risk of interference.

A thorough risk-focussed review of the consents has been performed by competent people from tie and CEC. This has concluded that the residual risk is contained in a small number of design packages. These have been the subject of prioritisation to mitigate their risk profile.

The combination of controlling the management process and focus on the key elements of the residual risk, constitute an effective risk mitigation framework. There are other higher-level mitigations which provide further help, notably the funding arrangements and the existence of a risk contingency in the project budget.

It is the view of the tie and CEC project team that these factors can be relied upon to manage the exposure successfully.

## Prior & Technical Approvals

## APPENDIX 1

| Critical Risks >21    | Description               | Risk | Issue   | Mitigations  |
|-----------------------|---------------------------|------|---|--|
| Technical Outstanding | A8 underpass              | 25   | Underpass – sewer conflict                                  | Technical solution now agreed and requires sewer to be diverted                                    |
| Prior Outstanding     | Haymarket                 | 25   | Prior approval for this batch has been problematic          | Revised submission made and will aim to approve as soon as possible                                |
| High Risks 11 - 20    |                           | Risk | Issue   | Mitigations  |
| Technical Outstanding | Section 6 Drainage        | 15   | VE solution changes design                                  | SDS are reducing the time taken to make final comments on board and complete IFC drawings          |
| Prior Outstanding     | Russell Road Bridge       | 20   |   | CEC will provide prior approval in time for piling works to commence                               |
| Prior Outstanding     | Murrayfield Stadium batch | 15   | Batch has been on hold pending decision on Roseburn Viaduct | Batch now taken off hold. CEC advised that revised Roseburn viaduct solution will be re-submitted. |

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Paper to : tie Board, Tram Project Board, TEL Board, CEC  
 Subject : Project Governance after Financial Close  
 Date : UPDATED 7th April 2008

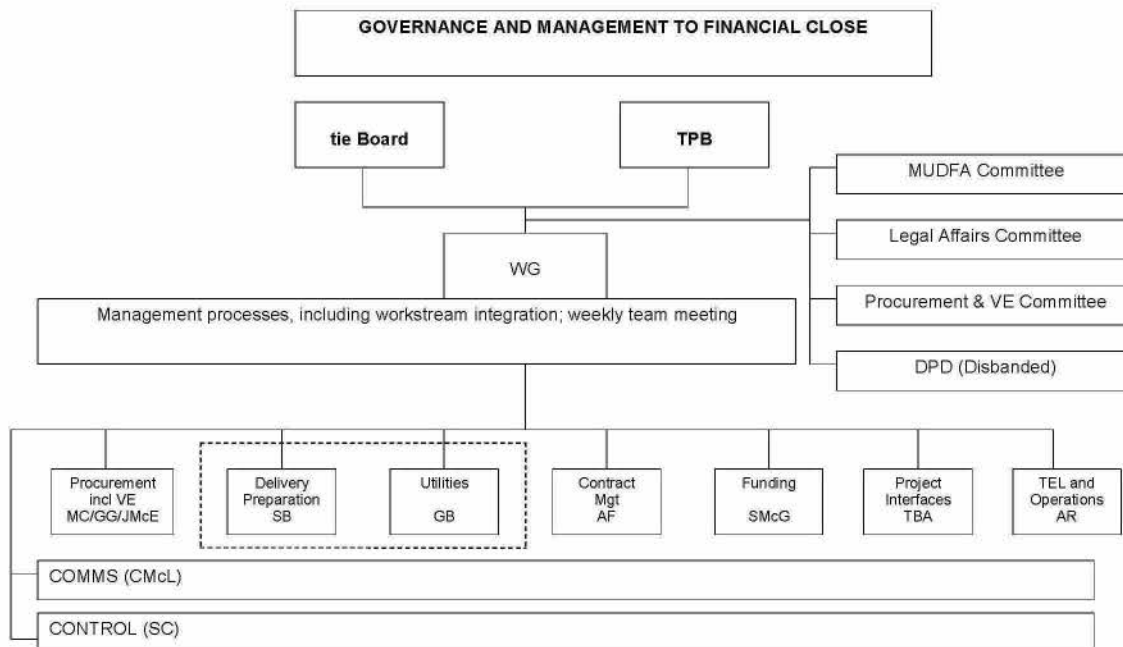
**THIS PAPER SUMMARISES THE PROPOSED GOVERNANCE AND MANAGEMENT MODEL AS IT STANDS AT 7th APRIL 2008. THE AREAS WHICH HAVE NOW BEEN UPDATED INCLUDE FINALISATION OF OPERATING AGREEMENTS AND THE DELEGATED AUTHORITY WHICH FLOWS FROM THOSE AGREEMENTS. THIS PAPER IS THE FINAL FORM SUPPORTING FINANCIAL CLOSE**

**Edinburgh’s integrated transport system  
 Project governance for the construction period**

**(1) Governance and management model in period to financial close**

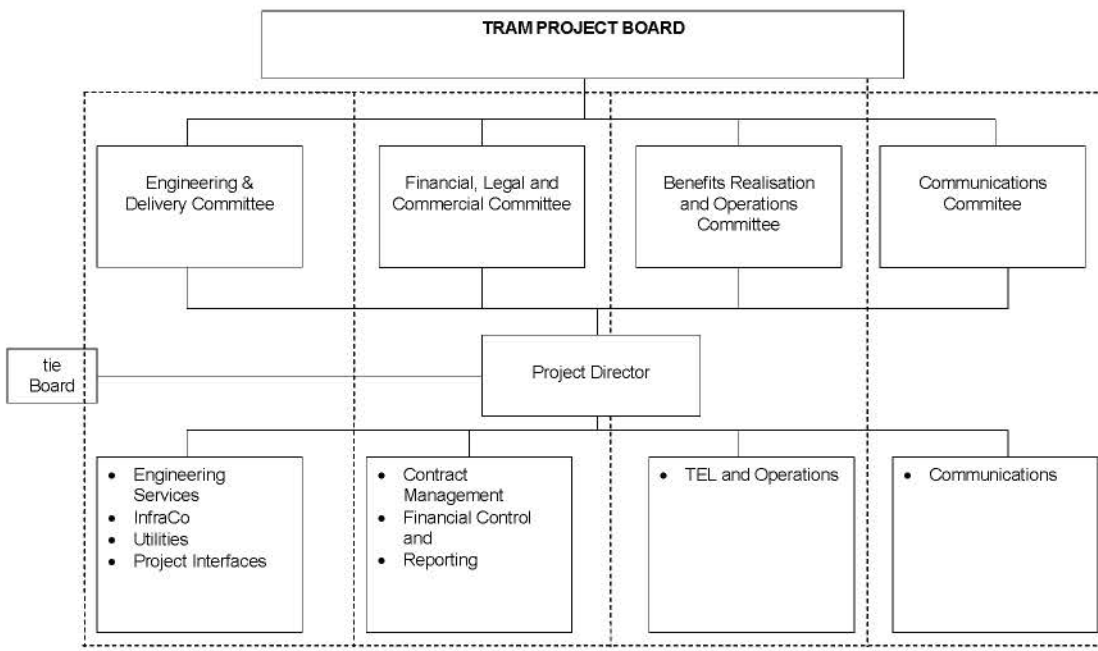
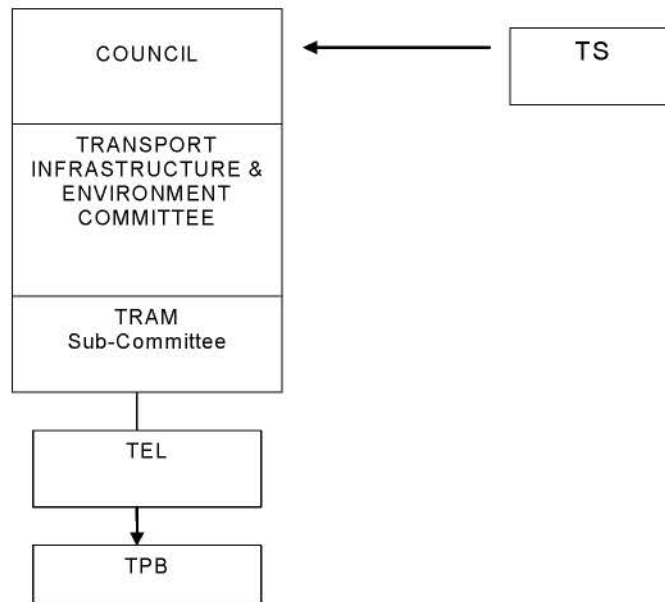
The recipients of this paper approved a governance and project management model for the period to Financial Close prior to the Council’s meeting on 25 October 2007. The purpose of this paper is to present the proposed model for the period from Financial Close to operational commencement, planned for Q2 2011. The proposed model is very similar to the outline presented in October but this paper is drafted to be independent of previous submissions.

The current model is set out in the following diagram, including the project workstream structure under the TPD.



(2) Governance and management model in construction period

The diagram below sets out the proposed governance model for the construction period .



The roles & responsibilities of the entities within the new governance and management model are summarised below.

#### Transport Scotland (TS)

TS exercise their oversight of the project through 4-weekly reporting in prescribed format and a 4-weekly meeting with the City of Edinburgh Council (CEC).

The principal contractual relationship between TS and CEC is the Grant Award Letter which sets out the terms on which TS will provide the balance of the £500m grant. This contains detailed reporting and certification requirements appropriate to the conduct and scale of the project..

#### CEC

CEC have established a "Tram sub-Committee" of the existing Transport, Infrastructure and Environment Committee. The sub-Committee is chaired by the Executive Member for Transport with a 6-8 weekly meeting cycle. The purpose of the sub-Committee is to review and oversee decisions with respect to the project. This will include addressing matters directly affecting the Council and providing assurance that matters which cross Council departmental boundaries are managed cohesively (for example, responsibilities for roads & traffic management and budgets).

CEC have prepared Operating Agreements between the Council and respectively tie Limited and Transport Edinburgh Limited (TEL) to codify the arrangements between the entities and the responsibilities of the two subsidiaries. The signing of the Operating Agreements creates the authority for tie and TEL to execute their responsibilities.

The Council Report approved on 20 December 2007 indicated that some issues will require to be referred to Council including the approval of the annual business plans for tie and TEL respectively and significant changes to Council obligations including material changes to scope and cost within the Tram Project, will also be reserved to Council. Full Council will also require to ratify settlement of any claims greater than £500k or £1million in a 12 month period. The precise definition of the delegated interface between the full Council and its committees is a matter for the Council.

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The Operating Agreements also specify certain matters which require the approval of a Council Monitoring Officer. The Monitoring Officer will be the same individual with respect to both tie and TEL and will also be a member of the TPB, in order to ensure that the governance structure is clear and singular.

#### TEL

The TEL Board is focussed on its overall responsibility to deliver an integrated tram and bus network for Edinburgh, on behalf of CEC. The Board is responsible for compliance with its Operating Agreement and it will also address any matters outwith the direct arena of Integrated Bus and Tram systems and any statutory TEL considerations.

The TEL Board comprises an independent non-executive Chairman, independent non-executive directors, Elected Members and Executive management. There is appropriate common membership across the TEL, tie and LB Boards to ensure consistency of approach.

The following matters will be a matter for the TEL Board to determine :

All matters affecting the programme, cost and scope of the Project except the following which are matters reserved to the Council:

- (A) (i) any actual or reasonably expected delay to the Project programme of greater than 3 months; or (ii) any **actual or reasonably expected increase in** cost of over £10m; relative respectively to the programme leading to commencement of revenue service by 31 July 2011 and capital cost of £512m (Phase 1A) or £87m (Phase 1B) as set out in the Final Business Case or as subsequently approved by the Council prior to commitment by tie to the Infraco Contract ; or (iii) notwithstanding the terms of (i) and (ii) above, any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis); or (iv) any substantial change to the design, scope or service pattern set out in the Final Business Case; and
- (B) the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000;

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TEL may delegate responsibility for all matters other than those specified at A and B above to the TPB and the TPB may in turn delegate responsibility for all other matters to tie, but only to the extent that such delegation is already within the remit of tie in the context of the tie Operating Agreement. TEL agrees that it shall retain ultimate responsibility for all matters it so delegates.

The Council's majority shareholding in Lothian Buses (LB) will be transferred to TEL and parallel changes to the composition of the Lothian Buses Board will be effected in due course.

#### Tram Project Board (TPB) and its sub-Committees

The TPB maintains its role as the pivotal oversight body in the governance structure. The TPB is established as a formal sub-Committee of the TEL Board with full delegated authority to execute the project in line with the proposed remit set out in Appendix 1. In summary, the TPB has full delegated authority to take the actions needed to deliver the project to the agreed standards of cost, programme and quality within the authority delegated to the TEL Board.

The suggested membership of the TPB is 7 people (Office of Government Commerce constituency definitions "highlighted"):

- Chair (David Mackay)
- Senior CEC Representatives - "Senior User Representatives" (Donald McGougan and Andrew Holmes)
- TEL CEO and Project "Senior Responsible Owner" (Neil Renilson)
- "Senior Supplier" representatives (tie Executive Chairman and TEL Operations Director) (Willie Gallagher and Bill Campbell)
- Executive Member for Transport (Phil Wheeler)

The Chair will continue to be the TEL Non-executive Chairman, rather than the Project SRO. Other parties, principally senior project management and advisers, will be called to attend as required, though it is anticipated that a common group of senior project directors will attend

The remit and delegated authority given by TEL to the TPB, and by the TPB to the SRO and Tram Project Director (TPD) are set out in Appendix 1. The TPD will formalise delegated authority downwards to senior members of the delivery team.

## tie Limited

tie's role is to deliver the tram network fit for operational purpose, on time and budget. For the foreseeable future, tie will have only one major project, the tram. It will maintain roles with certain smaller projects and will require to comply with normal statutory responsibilities as a limited company, including formal compliance with its Operating Agreement.

The tie Board presently comprises a group of independent non-executive directors and Elected Members under the Executive Chairman. The Elected Members will be the same on each of the TEL and tie Boards to ensure consistency of view across delivery of the system and operations. The independent non-executive members will also provide experienced participation in the TPB's sub-committee deliberations, as explained below.

In overall terms, the composition of the tie Board will be maintained in its present form. The Board will maintain its Audit and Remuneration committees, membership of which are restricted to the NXDs. In addition, a new tie Board sub-Committee will be established to address Health & Safety, chaired by an experienced NXD.

In its role on the tram project, tie provides services to the TPB. The tie Operating Agreement provides tie with the legal authority to enter into all competent contracts to deliver the tram system. The tie Board will delegate authority to its Executive Chairman to execute its contractual responsibilities for the tram project. The Tram Project Director (a tie employee) is given delegated authority by the tie Executive Chairman to manage and deliver the project. The authority given to the TPD in his role as a tie employee is synchronised with the authority delegated to him by the TPB. This ensures that the TPD leads the project delivery under delegated authority from his employer (tie) and from the project client (TEL through the TPB) which is consistently defined.

Further changes to the composition of the TEL, tie and LB Boards will be effected as is deemed necessary over the period ahead. In particular, in the event that tie assumes responsibility for additional major projects in the future, the Board composition may need to be addressed. All such changes will require the formal approval of the Council.

In summary, the roles of the parties are :

### **CEC**

- To be responsible for the creation of a financially viable integrated bus and tram system in line with the approved Business Case ;
- Compliance with the terms of the Grant Award Letter

### **TEL**

- Under authority delegated by its parent CEC, to prepare for the operation of the integrated tram and bus network, including oversight of the delivery of the tram infrastructure executed through its sub-Committee, the TPB ;
- Compliance with the CEC / TEL Operating Agreement ;
- Statutory responsibilities including Board membership, statutory reporting, maintenance of books of account and statutory records ;
- Matters relating to TEL employees including Health & Safety

### **TPB**

- Prepare for the operation of the integrated tram and bus network, including oversight of the delivery of the tram infrastructure, conducted directly or through scrutiny by sub-committees of the TPB of specific activities within the project



tie

- Management of the delivery of the tram infrastructure including management of the contracts written with third parties to achieve delivery of the tram network fit for operational purpose, on time and budget
- Compliance with the CEC / tie Operating Agreement ;
- Statutory responsibilities including Board membership, statutory reporting, maintenance of books of account and statutory records ;
- Matters relating to tie employees including Health & Safety

TS

- To provide grant funding in line with the terms of the Grant Award Letter

### (3) Practical operation of the governance model

It is recognised that there is inevitable duplication between the scrutiny by the tie Board of its Executive activities and the oversight role performed by TEL and the TPB. However, this situation is normal, if tie's role of providing a service to its client, in this case TEL, is borne in mind.

It is suggested that the tie and TEL Boards will meet every second period on a period-about basis. The frequency of TEL Board meetings is expected to increase as operational commencement approaches. The TPB and its sub-committees will operate on a 4-weekly cycle, linked to the 4-weekly report to TS. The means by which the Project Director arranges day to day management of the project is not reflected in this paper but will also follow the 4-weekly cycle and will respond to the reporting requirements of the tie and TEL Boards.

The outstanding matters required to finalise the calendar following Financial Close are :

- Dates for proposed CEC Tram sub-committee meeting
- Dates for 4-weekly TS / CEC meetings

The current TPB sub-Committee structure will be dissolved and the new sub-Committee structure will comprise :

#### Engineering & Delivery Committee (E&D)

- Delivery under contracts - Infracore, Tramco, Utilities / MUDFA, design,
- Health & Safety, Quality & Environment
- Improvement initiatives – VE, Innovation, ICT
- Project interfaces & approvals – Land & Property, Traffic, third parties

#### Financial, Commercial & Legal Committee (FCL)

- Financial management – reporting, control, audit, risk management, insurance
- Contract management – reporting, compliance, interface with delivery, claims & variations

#### Benefits Realisation & Operations Committee (BRO)

- Operational & integration planning
- O&M contract planning
- Transdev
- Marketing

#### Communications Committee

- Comms management – utilities / MUDFA, Construction, Media, stakeholders

It is anticipated that the BRO and Communications committees will not meet for the early period of construction in the absence of any material issues arising which require separate scrutiny. The TPB will deal directly with any relevant matters under these headings for the foreseeable future.

In order to create close cohesiveness between the TPB / sub-Committee governance model and the project management structure, the sub-Committees will be directly interfaced with the Project workstreams and the individual directors responsible. Appendix 2 sets out the interfaces which effectively constitute the remits for these committees.

To further reinforce cohesion, the tie Executive Chairman will Chair each of the sub-Committees. The attendance of senior project and client officers, and the clear responsibilities allocated to individual Project Directors, will ensure that appropriate independence and challenge is achieved. As currently, the sub-Committees will have clear remits and will focus on detailed interrogation of key issues, leading to recommendations to the TPB which retains decision-making authority over all key areas.

#### (4) Health & Safety

A detailed analysis of the means by which H&S responsibilities are discharged is set out in Appendix 2. In summary, H&S is clearly of paramount importance both currently and in the construction phase of the Project. CDM 2007 will be a key focus and will be given appropriate prioritisation by all parties at all levels. The application of legal H&S responsibilities in the context of the governance and management of a large, complex project requires very careful analysis.

The detailed definition, allocation and communication of responsibilities will be executed as part of the readiness process in advance of construction commencement.

#### (5) Approvals requested from recipients of this document – tie Board, TPB, TEL Board and CEC in appropriate sessions

The following approvals have been completed :

1. Approval of the proposed governance model for the period from financial close to operational commencement.
2. Approval of the tie and TEL Operating Agreements and all related delegated authorities
3. Confirmation of the proposed members and participants in the governance bodies
4. Confirmation of the proposed meeting cycle
5. Approval of the proposed H&S regime.

GB

| 07.04.08 [Authority levels amended in line with final form of Operating Agreement]

## Appendix 1 to Governance Paper - Tram Project Board (“TPB”) Remit

TPB has delegated responsibility for the delivery of an integrated Edinburgh Tram and Bus Network on behalf of TEL and CEC, in particular :

1. To oversee the execution of all matters relevant to the delivery of an integrated Edinburgh Tram and Bus Network, with the following delegations :
  - a. Changes above the following thresholds
    - i. Delays to key milestones of > 1 month
    - ii. Increases in capital cost of > £1m
    - iii. Adversely affects annual operational surplus by >£100k
    - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of > 0.1
  - b. Changes to project design which significantly and adversely affect prospective service quality, physical presentation or have material impact on other aspects of activity in the city
  - c. Delegate authority for execution of changes to TEL CEO (the Project SRO) with a cumulative impact as follows:
    - i. Delays to key milestones of up to 1 month
    - ii. Increases in capital cost of up to £1m
    - iii. Adversely affects annual operational surplus by <£100k pa
    - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of <0.1

[Note: these are cumulative impacts since the last position approved by the TPB.]

The TEL CEO will delegate similar authority to the Tram Project Director.

These levels of authority apply to all matters affecting the programme, cost and scope of the Project except the following which are matters reserved to the Council:

- (A) (i) any actual or reasonably expected delay to the Project programme of greater than 3 months; or (ii) any **actual or reasonably expected increase in** cost of over £10m; relative respectively to the programme leading to commencement of revenue service by 31 July 2011 and capital cost of £512m (Phase 1Aa) or £87m (Phase 1Bb) as set out in the Final Business Case or as subsequently approved by the Council prior to commitment by tie to the Infraco contract ; or (iii) notwithstanding the terms of (i) and (ii) above, any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis); or (iv) any substantial change to the design, scope or service pattern set out in the Final Business Case; and
- (B) the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000;

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All matters which fall to the determination of the TPB will be reported to the TEL Board on a comprehensive and timely basis.

Matters which do not fall within the TPB and TEL Board’s delegated authority levels described above will require determination by the Tram Sub-Committee of the Council.

2. To appoint the Senior Responsible Owner (SRO) and Tram Project Director (TPD) for the project and to receive reports from the SRO and TPD on project progress

3. To receive reports from sub-committees established to oversee specific areas, as approved by the TPB
4. To ensure project workstreams are executed according to robust programmes under the leadership of Project Director.
5. To approve the submission of funding requests and to recommend approval of funding terms to the TEL Board. TPB will also confirm to CEC compliance with all relevant aspects of the grant award letter.
6. To ensure proper reporting through the TPB Chairman to the TEL Board and to CEC (as appropriate) of decisions made.

## Appendix 2 to Governance Paper

Interface between new governance bodies and project management structure in the construction period – people identified are included for discussion only at this stage.

| TPB Governance body                         | Chair     | Management responsibility   | Director             |
|---|-----------|---|----------------------|
| Engineering & Delivery Committee            | Gallagher | Engineering & Delivery -<br>Infraco<br>Tramco<br>Utilities / MUDFA<br>Engineering design<br>Health & Safety planning & management | Bell                 |
|   |           | Improvement -<br>VE<br>Quality & Environment<br>ICT<br>Innovation   | McEwan               |
|   |           | Project Interfaces & Approvals -<br>Land & Property<br>Traffic management / regulatory<br>Other CEC, third party                  | Sim                  |
| Financial, Commercial & Legal Committee     | Gallagher | Financial management -<br>Financial reporting<br>Financial control, internal audit<br>Risk management<br>Insurance                | McGarrity/<br>Thorne |
|   |           | Contract management -<br>Contractual reporting & compliance<br>Claims & Variations management                                     | Fitchie              |
| Benefits Realisation & Operations Committee | Gallagher | Operational Planning -<br>Integration & service planning<br>O & M planning<br>Transdev<br>Commissioning<br>Marketing              | Richards             |
| Communications Committee                    | Gallagher | Communications management -<br>Utilities / MUDFA<br>Construction<br>Media<br>Stakeholder  | McLauchlan           |

## Appendix 3 to Governance Paper Health & Safety background and proposed operational structure

### *General*

H&S obligations are well-understood and entrenched in the project governance and management structure. The increased level of physical activity which may give rise to H&S risks once construction commences reinforces the need to ensure H&S responsibilities are clear and that the highest standards of H&S management are applied. These considerations must be addressed on a daily basis in all actions and at all levels by parties involved in Project.

In overall terms, the key H&S considerations for CEC, TEL, the TPB and tie are:

- the health & safety of their people - the corporate H&S Management Systems address this responsibility
- ensuring that CEC, TEL, the TPB and tie deliver against clearly stated H&S responsibilities in the framework of the project including working alongside third party H&S management systems
- monitoring and reporting regularly that these responsibilities are being properly discharged
- ensuring that all persons employed by CEC, TEL and tie are competent
- ensuring that contracts entered into address H&S issues adequately
- ensuring that H&S ramifications are considered when key investments and business decisions are made

These H&S considerations apply currently, throughout the period to Financial Close and throughout the period of construction and into operation of the tram system. The H&S responsibilities are currently defined clearly to meet the demands of the current project activity including the utility works now underway. These responsibilities will require to be revised to integrate with the revised governance structure described in this paper and to enable effective management of the full-scale construction activity which will follow Financial close. The narrative below provides a description of the responsibilities of the bodies involved in the project and has been drafted with the full involvement of DLA. A precise and legally supported H&S regime will be put forward for approval and then implemented in advance of financial close.

### *Relationship of revised governance model to H&S responsibilities*

The TPB creates an "inclusive" decision making process which is important for the effective operation of the project. The TPB will be a formal sub-Committee of the TEL Board so that members of the TEL Board on the sub-Committee retain the formal responsibility for decisions taken at the TPB, with all other parties to TPB deliberations being participants or observers only. The TPB itself is not a shelter from health and safety liabilities or a clearing house for liabilities. Legally CEC, TEL and tie cannot delegate H&S responsibility to the TPB in the governance structure and thereby declare that they have discharged their health and safety liabilities and have no further duty regarding input into or consideration of health and safety issues.

The ultimate responsibilities for the TPB decisions flow up to the TEL Board and CEC, subject to the intended election under the Construction Design and Management Regulations 2007 ("CDM 2007") of tie as "Client" under those regulations. A Procurator Fiscal may consider that all parties (CEC, TEL and tie), together constitute the entity for the discharge of H&S obligations. As a result H&S implications must be considered by all these parties when making significant decisions affecting design and implementation through the construction phase of the Project. The HSC guidance *Director's Responsibilities for Health & Safety* must be followed by CEC, TEL, the TPB and tie. Appropriate leadership should be demonstrated in this area by the boards and senior management.

Where changes are submitted for TPB approval, or are requested by the TPB, tie/TEL/CEC (and the appointed CDM 2007 parties) will be legally responsible for identifying and managing any impact that these changes will have on safety. The TPB will be responsible for ensuring that they understand and have responsibility for any decisions made in this respect. It is intended that tie will be mainly responsible for implementing the decisions made throughout the construction period.

It is considered that TEL/CEC would remain the "client" in terms" of CDM 2007 as the TPB is not a separate legal entity although it will make decisions on behalf of TEL/CEC. tie is responsible as the elected second client under CDM 2007 and the client/employer (for general health & safety regulations) for the overall project safety management for the development and implementation of the Project. Such an election is, however, not a full delegation of all rights and responsibilities. tie and the TPB must ensure that its activities or its stakeholders or advisors do not undertake actions that encroach upon the role of the designer under CDM 2007, because this would mean that they would require to demonstrate competency in this role and fulfil added responsibilities.

The revised project governance structure described in this paper will distance Transport Scotland from the H&S responsibilities as their responsibilities are related to those of the principal funder of the project, in the absence of any material involvement in design or construction matters.

Health & Safety, Quality & Environment will form an element of one of the new TPB governance sub-Committees. H&S matters within tie will be the responsibility of the Engineering and Delivery Director. In addition to the E&D Director's leadership on this issue, a senior NXD will be the nominated chair of the H&SQE sub-committee of the tie Board to add a further H&S check in the operation of tie and the TPB.

A regular safety report is produced and presented to the tie Board and to the TPB each month. The TPB will ensure that safety is a core agenda item for each meeting and will ensure that the safety report tabled at each meeting is actioned where appropriate. Copies of these reports, or summary documents as appropriate, will be disseminated to TEL and CEC. This will ensure that H&S issues are considered at senior level on a regular and disciplined basis.

#### *Legal backdrop*

There may be occasions where a decision which is made by the TPB under its delegated authority from TEL is driven by one of the stakeholder directors to the exclusion of the other members of the board. In the event of an incident, this may result in the contractual relationships or duties between the stakeholders being considered. Notwithstanding that financial indemnities could be put in place to cover losses suffered, if a particular party declares that it will be held accountable for a decision impacting safety, it is important to highlight that it is not possible to ensure that fines imposed as a result of prosecution can be the subject of an enforceable indemnity. It is not possible to contract out of criminal liability nor is it possible to insure against a fine. Although it may be competent to include a clause in a contract, it is possible that such a clause would be construed by the courts as unenforceable and contrary to public policy. In this context, the representative of each stakeholder would need to look to their employer, with regard to personal accountability.

The creation of appropriate safety responsibility structures, safety management systems and culture will form a key defence to any prosecution assuming all procedures have been followed. Clearly there could also be a number of other parties involved in a safety incident, for example contractors, sub-contractors, agency staff, designers, CDM-Coordinators and third parties.

The Corporate Manslaughter and Corporate Homicide Act 2007 came into force on 6 April 2008. Corporate homicide will be committed where a death is caused by an unlawful or grossly negligent act of the senior management of an organisation. The management and organisation of activities by senior management must constitute a "substantial element" of the breach, in other words, partial delegation of the duty will not prevent liability attaching to senior management. Breach is punishable by a fine. Although directors do not face personal liability under the Act, the offence will make directors more vulnerable to disciplinary action and further crystallise their accountability for health and safety compliance to their stakeholders. It remains possible for directors and senior management to face personal liability if there is sufficient evidence to bring a prosecution under the existing common law or under the Health & Safety at Work etc Act 1974.



**Edinburgh Tram Network**

**Contract Execution Suite**

- the Infraco Contract (and Schedule Parts 1 to 44);
- the Tram Supply Agreement (and Schedules 1 to 23) and the Tram Supply Novation Agreement;
- the Tram Maintenance Agreement (and Schedules 1 to 24) and the Tram Maintenance Novation Agreement;
- the SDS Novation Agreement and its Annexes 1 to 7;
- the CEC Guarantee
- the tie-CEC Operating Agreement.

Source : DLA

# EDINBURGH TRAM PROJECT REPORT ON TERMS OF FINANCIAL CLOSE (“CLOSE REPORT”)

## FOR THE ATTENTION OF THE TRAM PROJECT BOARD, TEL BOARD AND TIE BOARD

### Purpose of report

The principal contractual commitments to be entered into at Financial Close are :

- Infraco Contract Suite – incorporating Infraco and Tramco construction / supply and maintenance ; Tramco and SDS Novation ; security documentation ; ancillary agreements and schedules including Employer’s Requirements. A comprehensive list of the documents to be entered into by tie is included as an Appendix to this report
- Council Financial Guarantee
- Grant Award Letter
- Operating Agreements between the Council and respectively tie and TEL

Various important agreements with third parties have also been completed or are in substantially agreed form.

Two documents have been prepared to provide a comprehensive view of the principal terms of the contracts and related documents which are being committed to at Close. This report from tie provides information across a number of key areas. A parallel report from DLA, with supporting papers from tie, covers the content of the Infraco contract suite including the legal underpinning to the final contract positions, addressing specific CEC concerns. The DLA Report is a separate document in order to protect the confidentiality of the legal advice offered to tie and CEC. Specific issues of interest to CEC are addressed in each document.

A reasonable degree of prior knowledge is assumed. A draft version was reviewed at the meetings of the TPB, tie Board and TEL Board on 23<sup>rd</sup> January 2008 and the approvals below were granted on that date. The delegated structure has been implemented.

It is understood that the Council will prepare appropriate papers for its own approval purposes, specifically to support the provision of delegated authority to the tie Executive Chairman to execute the contracts. The Council will also require to confirm its approval of the Grant Award Letter and the Financial Guarantee in addition to the contracts which will be entered into by tie.

|     |  |
|-----|--|
| TPB | approval of terms of Infraco and all related documents including note of main open areas, recommendation to TEL on those terms and on the proposed delegated authority to approve and sign ; approval of governance and delegation paper   |
| TEL | approval of terms of Infraco and all related documents including note of main open areas, recommendation to Council on those terms and the proposed delegated authority to approve and sign ; acknowledgment of terms which will be assigned to TEL in due course ; approval of the TEL Operating Agreement and; approval of governance and delegation paper |
| Tie | approval of terms of Infraco and all related documents as basis for commitment, including note of main open areas; acknowledgement of the proposed delegated authority to approve and sign ; approval of the tie Operating Agreement ; approval of governance and delegation paper   |

## **Report Contents**

- 1. Introduction**
- 2. Infraco Contract Suite**
- 3. Grant Award letter**
- 4. Risk of procurement challenge**
- 5. Third party agreements**
- 6. Land acquisition arrangements**
- 7. Governance arrangements & corporate matters**
- 8. Risk assessment of in-process and provisional arrangements**
- 9. Update on critical workstreams and readiness for construction**
- 10. Specific confirmations**

## **Appendices**

- Appendix 1 – SDS design delivery and consents risk management**
- Appendix 2 – Governance & Delegations paper**
- Appendix 3 – Composition of Infraco Contract Suite**

## (1) Introduction

The significant stages in the project to date include :

|                  |  |
|------------------|--|
| April 2003       | Ministerial approval of initial Business Case and grant award        |
| December 2003    | Finalisation of STAG and submission of Bills to Parliament           |
| May 2004         | Commencement of early operator involvement with Transdev             |
| October 2005     | Commencement of design work under SDS                                |
| April / May 2006 | Royal Assent to Tram Bills   |
| October 2006     | Award of Multi Utility Diversion Framework Agreement to AMIS         |
| April 2007       | Commencement of utility diversion work under MUDFA                   |
| May / June 2007  | Change of government and re-confirmation of project                  |
| October 2007     | OGC Gateway 3 Review   |
| October 2007     | Final Business Case for fully integrated system approved by CEC      |
| December 2007    | Resolutions to proceed approved by CEC                               |
| December 2007    | Mobilisation & advance works contracts awarded to Tramco & Infracore |
| May 2008         | Financial Close – construction and vehicle supply                    |

Although there have been several key events, the completion of the contract suite which commits delivery of the system is highly significant in terms of the scale of commitment and the definitive nature of the programme to complete the project.

To reach this stage has involved close collaboration over a number of years between tie, TEL and the Council along with principal consulting and contractual partners. Throughout, progress has been monitored by the Project Board and the tie and TEL Boards, with full Council approval at key stages. Until mid-2007, Transport Scotland (and predecessor departments) played an active role in the project, since then a more arms length role has been played but crucially this has supported the commitment to the majority of the funding.

In addition to the routine involvement and monitoring of progress by stakeholders through the governance procedures, the project has been cleared through periodic Gateway Reviews, under the Office of Government Commerce rules and executed by experienced external assessors. A further independent review of the project was performed by Audit Scotland in June 2007, following which the principle of the Scottish Government's grant award was confirmed.

The balance of this report summarises the main features of the project and its supporting documentation as a basis to assess readiness for commitment. More detailed information is available on every aspect on request, subject to commercial confidentiality.

## (2) Infraco contract suite

The DLA Report provides extensive commentary on the development and final content of the Infraco Contract Suite.

The narrative below addresses three fundamental areas :

- Price
- Programme
- Scope

A section has also been included to address the interface between the Infraco contract Suite and the agreements with third parties relevant to construction.

**THE MATERIAL IN THIS SECTION IS COMMERCIALY CONFIDENTIAL AND FOISA EXEMPT.**

### *2.1 Summary Pricing Statement – Infraco and Tramco*

The following table summarises the final pricing for Infraco and Tramco in the context of the budget provisions made in the Final Business Case.

|  | £m           |
|--|--------------|
| <b>Infraco</b>                                   |              |
| <b>Negotiated Infraco Price</b>                  | <b>233.5</b> |
| <b>Other items / adjustments (see 8.2 below)</b> | <b>5.0</b>   |
| <b>Net other items in Infrastructure budget</b>  | <b>5.3</b>   |
| <b>Total budget required for infrastructure</b>  | <b>243.8</b> |
| <i>Increase in Base Cost compared to FBC</i>     | <i>17.8</i>  |
|  |              |
| <b>Tramco</b>                                    |              |
| <b>Negotiated Tram Supply Price</b>              | <b>55.0</b>  |
| <b>Other items (see 8.2 below)</b>               | <b>3.0</b>   |
| <b>Total budget required for Tramco</b>          | <b>58.0</b>  |
| <i>Increase in Base Cost compared to FBC</i>     | <i>6.6</i>   |

The increase in Base Costs for Infraco is a result of a negotiated position on a large number of items including the contractual interfaces between the Infraco, Tramco and SDS contracts and substantially achieving the level of risk transfer to the private sector anticipated by the procurement strategy. It also reflects capital expenditure required on lifecycle related costs including mobilisation of the maintenance teams and acquisition of spare parts.

The increase in Base Costs for Infraco of £17.8m approximates closely to the allowance which was made in the FBC for procurement stage risks i.e. the increase in Base Costs which might have been expected to achieve the level of price certainty and risk transfer which has been achieved.

The increase in Base Costs for Tramco results from lifecycle related costs required and, significantly, a material weakening of Sterling against the Euro in the period between Preferred Bidder appointment and the fixing of the exchange rate in late December following FBC approval.

A simple reconciliation of the total Risk Allowance for the project between FBC and Financial close is:

|   | £m     |
|---|--------|
| Risk Allowance in FBC   | 49.0   |
| Risks crystallised in contract costs :  |        |
| Infraco   | (17.8) |
| Tramco  | (6.6)  |
| Other risk items now in base cost   | (2.2)  |
| Increase in Phase 1a risk estimate deemed necessary as a consequence of previous increases and taking cognisance of updated QRA | 9.9    |
| Risk Allowance at Financial Close (see 8.6 below)   | 32.3   |

Subsequent to the position described in the tables above being reached, a further round of negotiations instigated by Bilfinger Berger took place. The detail behind the final position reached has been documented separately for CEC.

The total Phase 1a project cost budget is settled at £512m, of which £133m has been incurred by 31<sup>st</sup> March 2008.

## *2.2 Summary of Programme – Infraco and Tramco*

The critical milestones are :

|  |               |
|--|---------------|
| Contract Award                                   | May 2008      |
| Commence on site (demolitions)                   | May 2008      |
| Commence on Street Works                         | August 2008   |
| Commence Princes Street Blockade                 | January 2009  |
| Decision on 1b                                   | By March 2009 |
| Take Delivery of 1 <sup>st</sup> Tram            | March 2010    |
| Complete Depot & Test Track                      | March 2010    |
| TRO made   | April 2009    |
| Construction substantially complete              | January 2011  |
| Commence Shadow running                          | April 2011    |
| Edinburgh Tram Line 1a Open for Revenue Service  | July 2011     |
| Line 1b Open for Revenue Service (if instructed) | January 2012  |

This programme has been developed around key assumptions and constraints such as:

- Operation within Construction Code of Practice working hours
- Compliance with embargoes affecting key city centre and Forth Ports areas
- Design and approvals early start constraints
- MUDFA diversion early start constraints
- Critical BBS skill resource constraints (e.g. track welders / Overhead line staff)

The most significant of these are outlined below.

### Design and Approvals relationship with INFRACO Construction Programme

The SDS design and approvals programme (including CEC and other 3<sup>rd</sup> Party approvals e.g. Network Rail) has been used during the development of, and to agree, the INFRACO Programme.

There are a number of areas where the Design and Approvals Programme is the early start constraint for INFRACO, principal amongst these are:

- Section 1A: Forth Ports area
- Section 2A: Haymarket Viaduct
- Section 5A Structures at Roseburn / Murrayfield
- Section 5B Balgreen Road, Carricknowe Bridge, South Gyle Access Bridge
- Section 5C A8 underpass
- Section 6 Depot
- Section 7A Gogarburn Structures

Sections which link to the critical path within 1 month are:

|                     |                                      |
|---------------------|--------------------------------------|
| Section 1A:         | Forth Ports area                     |
| Sections 1B, 1C, 1D | Track                                |
| Section 5A          | Structures at Roseburn / Murrayfield |
| Section 5B          | Carricknowe Bridge                   |
| Section 5C          | A8 underpass                         |
| Section 6           | Depot                                |

Tie has clear visibility of these critical path linkages and is actively managing their delivery within the management processes described in Appendix 1.

### MUDFA relationship with INFRACO Construction Programme

The MUDFA Rev06 programme has been used during the development of and to agree the INFRACO Programme.

There are a number of areas where MUDFA is the early start constraint for Infraco, principal amongst these are:

- Section 6: Depot
- Section 2A: Haymarket Junction
- Section 1C: Princes Street, Picardy Place and St Andrews Square
- Section 1A Ocean Terminal – Newhaven & Ocean Drive at Victoria Bridge

The sections which link to the Construction Critical Path within 1 month are:

|             |   |
|-------------|---|
| Section 6   | Depot   |
| Section 2A: | Haymarket Junction                                  |
| Section 1C: | Princes Street, Picardy Place and St Andrews Square |

The BBS programme is based on V6 of MUDFA. Continual reviews of MUDFA programme have been implemented to avoid conflicts with Infraco undertaken by tie. This evaluation has been consistently evaluated & updated in the QRA

## TRAMCO relationship with INFRACO Programme

The TRAMCO design, manufacture, testing and commissioning programme has been used during the development of the INFRACO programme and has been fully interfaced with the Infraco programme.

Programme version V31 will be contained within the SDS novation agreement. Any variance between V26 and V31 which has an impact on the BBS programme will be dealt with through the contract change process.

### *2.3 Scope of works – Employer’s Requirements*

The scope of the project is defined in the Employer’s Requirements Schedule to the main Infraco contract and the stated scope has been aligned to the contractor’s proposal defining the construction approach and to the scheme design prepared by Parsons Brinckerhoff. This interlocking set of detailed documents combine to form the scope of the project in contractual terms.

The Employers Requirements (ERs) are a comprehensive set of specifications which set out the project obligations and responsibilities against which the construction consortium (BBS) must comply. It runs to some 650 pages and sits as a schedule within the Infraco contract. The document has evolved as the business case and design has been developed and reflects the inputs of the key ‘user’ stakeholders such as the Council, TEL and Transdev as well as the requirements of the Tram Design Manual and CEC design guidelines.

The document contains sections relating to how the project as a whole is to be delivered (for example project management, testing and commissioning and maintenance) as well the detailed systems and equipment requirements. The document was issued as part of the ITN package. Because it is essentially a procurement specification, wherever possible (and appropriate) tie have avoided being prescriptive and detailed because this would limit the freedom of bidders to propose their own specific, competitive solutions.

Since preferred bidder award, all of the ER terms have been reviewed in a three way technical alignment process:

- BBS proposal → ERs.  
To ensure that BBS proposals comply with the ERs. This has involved removing all of the stated non-compliances noted at the preferred bidder stage by either relaxing the ER clause (without affecting the output requirements) or by updating the proposal to make it compliant. Commercial alignment of the ERs and the Infraco proposals has been concluded.
- SDS design → ERs  
Because the SDS Design had responded to an up to date though not final draft of the ERs, the final alignment process produced no material mis-alignment issues. The final alignment review identified potential mis-alignment which was documented and assessed for its cost and programme implications and some minor amendments were agreed.
- Proposal → SDS design  
To ensure that in areas where the ER terms allow flexibility in approach, it was necessary to ensure that the BBS proposed solution was consistent with the SDS design. A review of the final Proposals against the SDS design was executed and again some minor amendments were agreed. The main issue was the extent of road reinstatement and adequate allowance has been made in the final budget to accommodate this factor.



In addition to these processes the ERs have also been reviewed in varying degrees of detail by three legal teams, DLA, BB's lawyers and Siemens lawyers (because a far larger part of the ERs relate to Siemens scope). In these cases the ERs were checked for consistency and alignment with the contract suite. All evident ambiguities, duplications and gaps have been dealt with to ensure that as a vital contract document it can be used effectively in the future.

DLA have also undertaken a legal review to ensure that within the Infraco Contract there is a contractual mechanism for precedence of T&C's over the ER's in the event of ambiguity and for tie to instruct how any ambiguity or inconsistency is dealt with. tie do not anticipate any significant risks to CEC in this respect.

The tie team is confident that the final version of the ERs, the contract version fully meets the requirements of the client, i.e. is consistent with the technical principles of final business case; and is consistent with both the SDS design and BBS proposals.

## *2.4 Interface of Infraco with relevant third party agreements ("3PAs")*

During the process of preparing the parliamentary Bills and their passage to Royal Assent, a number of agreements were reached with third parties which affect or could affect tram construction. The objective of these agreements was to mitigate risk that construction could be impeded while accommodating all reasonable requests from the third parties. These arrangements are common in any major project of this type. The commitments entered into were reflected as follows :

- commitments in the Act and related documents (CoCP, Noise & Vibration policy etc)
- 3rd party formal legal agreements
- letters to 3rd parties

Although the legal status is different, it would be tie's objective that the commitments are fulfilled.

There are broadly two groups of agreements – those major agreements where the terms have been stepped down into the Infraco Contract Suite (and which BBS have reviewed) ; and those which are independent of Infraco. The stepped down terms are covered by the full protection against breach implicit in the Infraco contract. The risks from the independent agreements are covered by a general obligation by Infraco not to put tie in breach so long as the terms of the independent 3PAs are reasonable in the context of a normal construction process.

The terms of the agreements and their relationship to the Infraco Contract Suite were the subject of a review by DLA which has been summarised and reported to CEC. Nine Utility Agreements exist but are not stepped down into Infraco and four other agreements (with RBS, FP, SRU & Stanley Casinos) are stepped down into Schedule 13, but not in their final form as these agreements are not yet signed.

Infraco are likely to undertake some utility diversions where MUDFA are unable to do so. This will be instructed as a tie change. At the same time the nine agreements with utility companies will be varied into Infraco as these are required for the implementation of such works.

The final RBS, Forth Ports, SRU and Stanley Casino agreements will be varied as a tie change once completed. There is low risk in that either budget provision has been made for these items or additional funding is being provided by that 3<sup>rd</sup> party.

### **(3) Grant Award Letter**

Transport Scotland will provide up to £500m of the total capital cost and the balance will be provided by CEC, which has initially allocated £45m for this purpose. The source of these funds is a matter for the two funders. The Government grant is documented in an award letter which is specific to the project but follows standard terms for grants under S70 of Transport (Scotland) Act 2001. CEC has identified a range of sources and an independent review confirmed the validity of the assumptions made by the Council.

The programme concentrates on Phase 1a initially and the parties have the opportunity to commit to Phase 1b before 31 March 2009 on pre-agreed terms with BBS. During 2008-9, an assessment will be made of funding availability to support Phase 1b. Government contribution will not exceed £500m under the current arrangements.

Grant will be drawn down pro rata with Council contribution. The amounts of grant available in each financial year will be capped, with the balance of any undrawn grant added to the sum available in 2010-11. There are detailed arrangements for payment approval and audit.

With the contributions agreed, the pro rata drawdown mechanism becomes an accounting process each 4-week period and within tolerances will not create any difficulty. The annual capping does have potential to create difficulty, but it is felt there is sufficient tolerance in the spend plans versus funding availability that this limitation is manageable. The funding position will be actively managed and CEC anticipate receiving recovery from Transport Scotland for any interest cost incurred if borrowing is necessary to meet contractual commitments beyond the funding available from Transport Scotland in a particular period.

The terms of the grant letter are weighted in favour of the awarding body and fall short of the sort of protection which a borrower would seek from a commercial lending bank. This is however normal and the Council are satisfied that the terms of the award offer sufficient protection bearing in mind the relationship between Government and the Council.

The letter was negotiated with TS by tie and Council Finance and Legal officials with comment from DLA. See Section 7 for taxation assessment.

#### **(4) Risk of procurement challenge**

*This section contributed by Jim McEwan, who performed a review of procurement process integrity independent of the main procurement team.*

*The legal advice provided to tie and CEC is summarised in the DLA Report and relates to the final negotiated position.*

##### Summary

Over the last 12 months tie has pursued the procurement of both the Infraco contract for the construction and maintenance of the Tram infrastructure in its entirety and the Tramco contract for the supply, delivery and maintenance of the Tram vehicles. The focus of the procurement strategy was to deliver fixed price contracts for each.

The process followed for each contract was consistent with that specified by the EU directive on Public procurement and details of the evaluation methodology employed are outlined below.

The Bilfinger Berger and Siemens (BBS) consortium have been duly awarded preferred bidder status for the Infraco contract.

CAF has been awarded preferred bidder status for the Tramco contracts.

In the event of any challenge to these awards tie is well placed to successfully defend the fairness and integrity of the process undertaken in the selection.

Opportunities have been provided for de-briefing on the procurement to unsuccessful suppliers for both Tramco and Infraco. This was undertaken on 4th April 2008 with one further Tramco debrief to be arranged. No further action is expected from any bidder.

The BBS consortium are in the process of finalising arrangements to include CAF in the consortium. In principle, tie is content that this should happen and indeed the concept was acknowledged at the time of preferred bidder selection, though with CAF Novation being the required approach to support Financial Close. Tie and DLA are monitoring the BBS / CAF arrangements to ensure that no perception of a change in bid terms could be construed.

##### Infraco

The Evaluation Methodology employed by tie in the Tram Project is detailed in a document dated 8th January 2007 'Evaluation Methodology for submissions in response to the invitation to negotiate issued on 3rd October 2006 for the procurement of the Infraco for Edinburgh Tram Network' .

In the process 6 key areas were identified in the evaluation and a stream leader appointed to each :

- Financial
- Programme and Project Execution Proposals
- Project Team and Resources
- Technical and Design proposals
- Legal and Commercial
- Insurance

Evaluation team members were identified in the methodology together with stream leaders for each of the key areas

Each team was charged to prepare a 'consensus' score matrix on each of the key areas, these have been duly completed and lodged in the central document repository.

Proper probity on the process was maintained with financial information being restricted to only those in the finance stream and to the tie executive team.

Security employed on maintaining confidentiality was consistent with best practice with documentation stored in a locked room and the financial documentation stored in a locked cabinet within the room. (Note: The details of the financial bids were only available to those in the Financial stream, the evaluation of the other streams was therefore carried out without prejudice on costs.)

All meetings with Suppliers were documented and the notes of said proceedings are held in the central repository.

Financial position was reviewed as was the normalisation process which ensures bids are viewed on an equal footing basis

### Tramco

The Evaluation Methodology employed by tie in the Tram Project is detailed in a document dated 11<sup>th</sup> October 2006 and titled Tramco Evaluation Methodology.

The process employed was identical to that employed in the Infraco evaluation as detailed above with 6 streams and the same methods of approach on scoring, confidentiality, probity and security. All required documents have been lodged in the central document repository.

## (5) Third Party Agreements

*This section contributed by Alasdair Sim, who took the lead role developing the agreements. A second (and consistent) view on risk is provided by Stewart McGarrity in Section 8.*

In addition to the principal Infraco Contract Suite, there are a number of agreements which are of varying significance to Financial Close. This section describes the purpose and status of these agreements, together with an assessment of the level of risk to programme / cost arising from the agreements remaining open at the date of Financial Close.

THE AGREEMENTS ASTERISKED ARE REGARDED AS THE MOST IMPORTANT IN RELATION TO REACHING A ROBUST POSITION AS AT FINANCIAL CLOSE.

The agreements addressed in this section are as follows :

- 5.1 Edinburgh Airport Limited - Licence \*
- 5.2 Edinburgh Airport Limited – Lease \*
- 5.3 Edinburgh Airport Limited – Operating Agreement
- 5.4 CEC/tie Licence \*
- 5.5 SRU Agreement
- 5.6 Royal Bank of Scotland Agreement
- 5.7 Local Code of Construction Practice – Forth Ports \*
- 5.8 Local Code of Construction Practice – New Edinburgh Limited \*
- 5.9 Local Code of Construction Practice – Edinburgh Airport \*
- 5.10 Network Rail Asset Protection Agreement \*
- 5.11 Network Rail Depot Change \*
- 5.12 Network Rail Station Change \*
- 5.13 Car Park Compensation Agreements
- 5.14 Network Rail Framework Agreement \*
- 5.15 Network Rail Lease & Servitude Agreements
- 5.16 Forth Ports Agreement
- 5.17 Stanley Casinos Agreement
- 5.18 Other Site Specific Code of Construction Plans
- 5.19 Licence – The Gyle
- 5.20 Licence – West Craigs
- 5.21 Network Rail – Neighbour Agreement
- 5.22 Network Rail – Operating Agreement
- 5.23 Network Rail – Bridge & Bridge Lease Agreements
- 5.24 Telewest utility agreement
- 5.25 Scottish Power utility agreement \*
- 5.26 DPOFA 2007 Revision
- 5.27 Mobilisation agreements (Infraco and Tramco)

The execution of these agreements has focussed primarily on construction risk. There remains a very low risk that residual agreements will not be agreed prior to operation. tie is creating a plan for completion of these agreements to ensure that they are in place well in advance of operation.

## 5.1 Edinburgh Airport Limited - Licence \*

### Purpose of Agreement

This is a licence agreement between Edinburgh Airport Ltd and City of Edinburgh Council, the purpose of which is to enable/facilitate the construction of the Edinburgh Tram within the boundary of Edinburgh Airport. This agreement covers MUDFA and INFRACO works as well as the construction of the Burnside Road alternative access route, and sets out the working arrangements between EAL, tie/CEC and contractors working on the Edinburgh Tram Network.

### Current Status of Agreement

The agreement is signed. This agreement has been drawn down into Schedule 13 of the INFRACO Contract.

## 5.2 Edinburgh Airport Limited – Lease \*

### Purpose of Agreement

This is a 175 year lease between Edinburgh Airport Limited and City of Edinburgh Council to facilitate the operation of the Edinburgh Tram Network. This lease follows the terms of the Minute of Agreement signed by the two parties during the Parliamentary process in September 2005.

### Current Status of Agreement

This agreement is signed.

## 5.3 Edinburgh Airport Limited – Operating Agreement

### Purpose of Agreement

The purpose of the operating agreement is to set out operational interface arrangements and procedures for running passenger services to and from the airport. This agreement will be an evolving document which will be updated periodically during the lifetime of the project.

### Current Status of Agreement

An outline document is current under review by tie and TEL. The intention is to develop this document into draft agreement form during the first quarter of 2008, and complete the agreement prior to commencement of passenger services.

### Risk to INFRACO Contract Award

The Operating Agreement is a non-construction related document and the risk to award of INFRACO Contract is considered low.

## 5.4 CEC/tie Licence \*

### Purpose of Agreement

The purpose of this licence is to pass over responsibility for land acquired for the ETN from CEC to tie. This will enable tie to manage the process of making land available to INFRACO on a programme/needs basis using the agreed Land Access Permit Procedure. CEC will manage the land/asset until the point that INFRACO take occupation of each worksite.

### Current Status of Agreement

The agreement is signed.

## 5.5 SRU Agreement

### Purpose of Agreement

This agreement governs design and construction activities in the vicinity of the Murrayfield Stadium. The agreement includes the construction of the Murrayfield Tram Stop, Roseburn Street Viaduct, Murrayfield Stadium Retaining Wall, the Wanderers Clubhouse remodelling, access accommodation works and the relocation of the training pitches. The agreement also sets out the requirement to develop a local construction plan which the INFRACO contractor will be obliged to comply with. This includes arrangements in relation to the temporary occupation of land within the Murrayfield site. The draft SRU agreement has been stepped down into Schedule 13 of the INFRACO Contract.

### Current Status of Agreement

The last important outstanding matter related to the S75 agreement, which CEC intend will replace the current Section 50 agreement and it is tie's understanding that this matter is now resolved. All residual minor matters are in process of being finalised and it is not anticipated that there will be difficulty in concluding the agreement..

### Risk to INFRACO Contract Award

INFRACO works are expected to commence in the vicinity of Murrayfield in June 2008. Risk to award of INFRACO Contract is considered low.

## 5.6 Royal Bank of Scotland Agreement

### Purpose of Agreement

This agreement builds upon the existing Section 75 Agreement signed in 2002 between RBS and CEC which committed RBS to fund the design, procurement and construction of the Gogarburn Tram Stop. The current proposal is for the INFRACO contractor to undertake the works within RBS land under licence, and sets out the procedure for CEC to later acquire the operational land based on the 'as built' (and at nil cost) using the GVD process. The agreement also covers the desire of RBS to maintain the landscaping between the Gogarburn Tram Stop and the A8 Glasgow Road.

### Current Status of Agreement

The agreement is currently in draft format, with finalisation expected on completion of the detail design, as this will allow final costs for the tram stop to be calculated. RBS have provided written confirmation that access to the land will be secured under licence.

### Risk to INFRACO Contract Award

INFRACO works are expected to commence in the vicinity of Gogarburn from mid-2009. Risk to award of INFRACO Contract is considered low.

## 5.7 Local Code of Construction Practice – Forth Ports \*

### Purpose of Document

The existing Minute of Agreement between Forth Ports and CEC requires the development of a Local Code of Construction Plan to govern how the construction works are to be undertaken within the Forth Ports area. This would include method statements, programme details and consultation/notification requirements to be agreed prior to the commencement of construction. The Forth Ports Minute of agreement is included with Schedule 14 of the INFRACO Contract.

#### Current Status of Document

tie and BBS are currently drafting a local COCP with Forth Ports and have reached agreement with Forth Ports on the general approach to construction in the Leith Docks area. tie meet with the Forth Ports Project Manager on a weekly basis and will continue to evolve the local construction plan as certainty on programme is established.

#### Risk to INFRACO Contract Award

INFRACO works are expected to commence in the Forth Ports area from November 2008. MUDFA works will recommence in the Leith Docks area following the Easter embargo period from April 2008, and is currently being undertaken on a work by works licence basis, which contains the relevant elements that INFRACO will include within the final Local Code of Construction Practice document.

Forth Ports, tie and BBS have been undertaking preliminary discussions around programme and approach to construction. Forth Ports have expressed a willingness to work with BBS to have the works completed in the Leith Docks area as quickly and seamlessly as possible. As a result, the risk to award of INFRACO Contract is considered low.

### **5.8 Local Code of Construction Practice – New Edinburgh Limited \***

#### Purpose of Document

The existing Minute of Agreement between New Edinburgh Ltd and CEC requires the development of a Local Code of Construction Plan to govern how the construction works are to be undertaken within Edinburgh Park. This would include method statements, programme details and consultation/notification requirements to be agreed prior to the commencement of construction.

#### Current Status of Document

tie and BBS are currently drafting a local COCP for Edinburgh Park and have consulted with Edinburgh Park Management Ltd and New Edinburgh Ltd on programme and approach to construction. NEL have confirmed in writing their acceptance of the construction programme.

#### Risk to INFRACO Contract Award

INFRACO works (track) are expected to commence in Edinburgh Park from June 2008, with construction of the Edinburgh Park Station Bridge commencing in August 2008. NEL have confirmed their acceptance of the programme and as a result, risk to award of INFRACO Contract is considered minimal.

### **5.9 Local Code of Construction Practice – Edinburgh Airport \***

#### Purpose of Document

The licence between EAL and CEC sets out construction requirements in Schedule Part 5 – Development Rights and Obligations. This agreement has been drawn down into Schedule 14 of the INFRACO Contract.

#### Current Status of Document

tie and BBS are currently drafting a local COCP based on the obligations set out in Schedule Part 5 of the EAL Licence Agreement. tie meet with the EAL Project Manager on a four weekly basis and are currently working with EAL to ensure that tram construction activities integrate with other works ongoing within the Airport. EAL are content with the approach and tie/BBS will continue to evolve the local construction plan as certainty on programme is established

#### Risk to INFRACO Contract Award

INFRACO works are expected to commence in September 2008. Positive engagement between EAL and BBS is ongoing and as a result, risk to award of INFRACO Contract is considered low.



## Network Rail (NR) agreements – general

The suite of NR agreements comprises the following :

- Asset Protection Agreement
- Station & Depot Change (NR with the Train Operating Companies)
- Framework Agreement
- Lease and Servitude Agreements
- Neighbour Agreement
- Bridge Agreement and Lease
- Lift & Shift Agreement
- Immunisation

### 5.10 Network Rail Asset Protection Agreement \*

#### Purpose of the Agreement

The APA is an agreement between NR and CEC which governs design/construction activities as well as access to Network Rail land. The APA is designed to ensure that the heavy rail network can operate in tandem with the construction and commissioning of the ETN.

#### Current Status of Agreement

The APA has been signed.

#### Risk to INFRACO Contract Award

This allows INFRACO to undertake works on NR land and there is consequently no material risk.

#### Additional comment provided by DLA

*The Asset Protection Agreement with NR has been concluded. This has been an arduous process, however the outcome is a document which achieves significant commercial improvements for tie/CEC on what was originally offered by Network Rail. The arrangement is nevertheless heavily tilted in Network Rail's favour, as is inevitable given the starting point of the biased regulatory template agreements. The main improvements secured have been:*

- *Significant widening of the circumstances in which tie can recover money from Network Rail;*
- *Reasonableness in Network Rail actions and ability to refer to the Infraco ETN Suite form of Dispute Resolution Procedure;*
- *Dilution of indemnities given by tie to Network Rail to a mutually acceptable level.*

*The unreasonable position taken by Network Rail regarding the indemnities contained in the Protection Provisions Agreements (entered into to remove Network Rail's objection to the tram scheme) delayed closure for a considerable time. This has now been resolved to restrict the scope and duration of this indemnity, particularly during construction.*

### 5.11 Network Rail Depot Change \*

#### Purpose of Document

This is a regulated process between Network Rail and First ScotRail, the operator of the Haymarket Light Maintenance Depot. Depot change is the process which defines the revised lease arrangements which will be required as a result of the tram construction and operation. This procedure also defines the methodology of undertaking works in the vicinity of the Haymarket Depot and sets out the interface requirements of the Depot Manager. A key requirement of FSR is that only one contractor (at a single work site) will be permitted to conduct works within the depot area at any given time. BBS, NR and First ScotRail are working together to ensure that this requirement can be met.

#### Current Status of Document

The formal submission of the Depot Change (by NR) to FSR was completed on 11/01/08. The regulated process allows for a maximum review period of 45 calendar days for comments to be submitted. FSR notified NR on 04/03/08 of their acceptance of the Depot Change proposal. The confirmed Depot Change Proposal was sent to the ORR for ratification on 07/04/08.

#### Risk to INFRACO Contract Award

INFRACO works at Haymarket Depot are scheduled for commencement after completion of the NR Pollution Prevention Works Contract (PPLMD). tie, BBS and NR are currently working to integrate the two programmes in order to minimise the risk of delay to INFRACO. At present, NR expect the PPLMD works to be completed at the end of September 2008, with INFRACO works scheduled to commence on the Roseburn Street Viaduct in January 2009. The Risk to award of INFRACO Contract is therefore considered low.

### **5.12 Network Rail Station Change \***

#### Purpose of Document

This is a regulated process between Network Rail and First ScotRail as the operator of Haymarket Station. The Station Change procedure also requires the consent of the other Train Operating Companies (TOC's) using the station and these are; First Cross Country, Virgin, Trans Pennine Express, National Express East Coast and EWS.

The station change concerns the permanent loss of 49 parking spaces at Haymarket Station Car Park and the temporary closure of the car park as a result of the construction of the Haymarket Viaduct and Tram Stop, as well as the relocation of taxis currently operating from the forecourt of station.

#### Current Status of Document

NR formally submitted the Station Change proposal to FSR on 16/01/08, which triggers the start of the 45 calendar day consultation process which ended on 01/03/08. FRS notified NR on 04/03/08 of their acceptance of the Station Change proposal. The confirmed Station Change Proposal was sent to the ORR for ratification on 07/04/08.

#### Risk to INFRACO Contract Award

As the Station Change proposal has been accepted by FSR and the other train operating companies who use Haymarket Station, the Risk to award of INFRACO Contract is considered minimal.

### **5.13 Car Park Compensation Agreements**

#### Purpose of Document

The loss of income generating car park spaces at Haymarket Station is a compensation matter for both NR and FSR. Under Station Change, FSR receives a standard indemnity from Network Rail to cover losses, so the commercial arrangements can be negotiated separately and do not form part of the Station Change approval process.

#### Current Status of Document

FSR have confirmed that the compensation formulae adopted for the Platform Zero settlement will be used as a basis for this negotiation, reflecting the duration of the FSR franchise. An estimate of the likely compensation to NR has been prepared with input from the District Valuer. tie's internal calculations on this basis indicate that the final compensation settlement is likely to be within the current budget allowance. .

#### Risk to INFRACO Contract Award

The compensation settlement to both NR and FSR are commercial arrangements which have a budget allocation within the FBC and are not part of the Station Change approval process. There is therefore minimal risk to the award of the INFRACO contract.

### **5.14 Network Rail Framework Agreement \***

#### Purpose of Agreement

This is an overarching document beneath which reside a suite of construction, property and operations related agreements.

#### Current Status of Agreement

The Framework agreement has been approved and signed by Network Rail management and legal advisors and is with CEC for signature.

#### Risk to INFRACO Contract Award

The agreement is not construction related and therefore represents minimal risk to award of the INFRACO contract.

### **5.15 Network Rail Lease Agreements & Servitudes**

#### Purpose of Document

Two leases are proposed, the first; with NR as landlord is a 175 year lease to allow operation of the ETN on NR owned land. The second lease is with CEC as landlord and allows NR to use the relocated car park at Haymarket Depot. The servitude agreements for Balgreen Road and Haymarket Station allow NR rights of access to the railway and NR owned infrastructure over CEC owned land.

#### Current Status of the Agreements

The documents are in agreed and final form. The tram lease does not become active until after construction and commissioning have been completed, and is suspensive on the execution of an Operating Agreement with Network Rail.

#### Risk to INFRACO Contract Award

These documents are not construction related, so the Risk to award of INFRACO Contract is insignificant.

### **5.16 Forth Ports Agreement**

#### Purpose of Agreement

The original "Minute of Agreement" between CEC and Forth Ports was signed in February 2006 and sets out a range of requirements for the SDS design in key areas of Forth Ports land. A variation of the Minute of Agreement was documented in Heads of Terms in November 2007. The variation related to changes requested by FP to the design which will be funded by Forth Ports.

#### Current Status of Agreements

The commercial principles are agreed and progress is being made toward concluding the agreement. The transfer of land from Forth Ports to CEC will be part of the FP contribution to the project, and this is part of the existing Section 75 agreement.

#### Risk to INFRACO Contract Award

This agreement should not impede signing of the Infraco contract.

## 5.17 Stanley Casinos Agreement

The Stanley Casinos side agreement is also design dependent and is in agreed form and takes cognisance of the revised junction and access proposals at the Constitution Street/Ocean Drive junction. The agreement will also include provision for remodelling the Casino car Park. There is no risk to award of the INFRACO Contract.

## 5.18 Other Site Specific Code of Construction Plans

### Purpose of Documents

As part of the suite of side agreements drawn down into Schedule 14 of the INFRACO Contract, there is a requirement in several agreements for the contractor to develop a local construction plan or CoCP as part of the notification/consultation process in advance of the works commencement. The relevant agreements are:

- USS
- Safeway/Morrisons
- Murrayfield Indoor Sports Club
- ADM Milling
- Ocean Terminal
- Royal Yacht Britannia
- Baird Drive Residents (Community Liaison Group undertaking)

### Current Status of Documents

tie and BBS have prepared a suite of drafts setting out the construction related requirements of the relevant side agreements.

It is notable that the construction requirements laid down in these side agreements generally relate to those aspects of site working such as confirmation of programme, maintenance of access during the works, pedestrian management, dealing with dust/noise, site cleanliness, reinstatement of property etc, that one would normally expect a competent contractor to be cognisant of.

### Risk to INFRACO Contract Award

All relevant 3<sup>rd</sup> Party agreements are detailed within the INFRACO contract in Schedule 13. The requirements on Infraco are entirely in line with normal construction practice and the risk to CEC for award of the INFRACO contract is considered low.

## 5.19 Licence – The Gyle

### Purpose of Document

The licence arrangements are intended to allow the MUDFA and INFRACO contractors to undertake the works within Gyle owned land prior to permanent acquisition. In agreeing to undertake this work under licence, CEC will be able to meet the terms of the existing side agreement whereby permanent land take is to be minimised. At this stage in the design process, SDS cannot define with certainty the extent of the operational land. The proposal made to The Gyle is therefore to defer permanent acquisition until this certainty is available.

The acquisition of the 'as built' operational land will eliminate the risk of not meeting the obligations of the side agreement. The existing side agreement already makes provision for a licence to undertake works.

### Current Status of Agreement

The Gyle have accepted the proposal to construct the works under licence. Works to relocate utilities outside the LOD at The Gyle commenced on 21 April 2008, with the main INFRACO works scheduled to commence in August 2008. It has now been agreed that the works will be undertaken under two licences. The first is in agreed & final form and allows for utilities works to take place outside the LOD. A letter from CEC was issued to The Gyle on 21 April 2008, confirming that the utilities licence will be signed by CEC within 3 working days. The second licence will cover the main INFRACO works. There is currently a conflict with the programming of the works on the A8 underpass, elements of which are scheduled to take place over the Christmas Shopping period. INFRACO are obliged under the Gyle Side Agreement to develop a works method statement (to be agreed with The Gyle) which seeks to avoid works causing disruption to businesses in The Gyle during the peak retail periods.

### Risk to INFRACO Contract Award

BBS, tie and The Gyle will work to develop an appropriate solution to the current programme issue in advance of commencement of the INFRACO works. Although there is no material risk to the award of the INFRACO contract, the programme revision is being addressed as a priority. tie confirm that there is sufficient risk allowance to accommodate the potential conflict between programme requirements and retail requirements agreed with the Gyle Shopping Centre.

## **5.20 Licence – West Craigs**

### Purpose of Document

The licence will allow the INFRACO contractor to undertake the works within West Craigs owned land prior to permanent acquisition. In agreeing to undertake this work under licence, CEC will be able to meet the terms of the existing side agreement whereby permanent land take is to be minimised. At this stage in the design process, SDS cannot define with certainty the extent of the operational land. The proposal made to West Craigs is therefore to defer permanent acquisition until this certainty is available.

The acquisition of the 'as built' operational land will eliminate the risk of not meeting the obligations of the side agreement. The existing side agreement already makes provision for a licence to undertake works.

### Current Status of Agreement

The licence to undertake the works on West Craigs land was incorrectly executed by West Craigs. The engrossed document has been returned unchanged and tie has been informed that it is now signed by West Craigs and is available for CEC signature. Works to relocate the 800mm water main at Gogar Depot will commence on 28 April 2008.

### Risk to INFRACO Contract Award

INFRACO works are expected to commence on the proposed licence site from January 2009. There is no risk to award of the INFRACO contract.

## **5.21 Network Rail – Neighbour Agreement**

### Purpose of Agreement

This agreement sets out the benefited and burdened property between CEC and Network Rail land. This agreement ensures that access to the railway network across tram land is maintained at specified points, and defines the various structures supporting the adjacent heavy rail property.

### Current Status of the Agreement

The neighbour agreement is in agreed and final form and does not get signed per se, but rather the agreed burdened property plans are registered with The Keeper (Registers of Scotland). This will happen after the framework agreement is finalised.

#### Risk to INFRACO Contract Award

The Neighbour Agreement is a non-construction related document, and for this reason, it offers insignificant risk to CEC for award of the INFRACO Contract.

## **5.22 Network Rail – Operating Agreement**

#### Purpose of Agreement

The purpose of the operating agreement is to set out operational interface arrangements and procedures for running tram passenger services adjacent to the railway line. This agreement will be an evolving document which will be updated periodically during the lifetime of the project.

#### Current Status of Agreement

A draft is current under review by tie and TEL. The intention is to develop this document into draft agreement form during the third quarter of 2008, and complete the agreement prior to commencement of passenger services.

#### Risk to INFRACO Contract Award

The Operating Agreement is a non-construction related document and the risk to award of INFRACO Contract is considered low.

## **5.23 Network Rail – Bridge Agreement & Bridge Lease**

#### Purpose of Agreement

The purpose of the Bridge Agreement and Bridge Lease is to allow operation of the ETN and set ongoing maintenance and operational responsibilities for the Carrick Knowe and Edinburgh Park Station Bridges, as these structures interface directly with the heavy rail network. The APA governs the construction of these bridges.

#### Current Status of Agreement

The framework agreement sets out that NR and CEC will work together, both acting reasonably, to develop a post construction Bridge Agreement. CEC will not be exposed to future network enhancement costs in relation to bridges.

#### Risk to INFRACO Contract Award

The Bridge Agreement is a non-construction related document, and for this reason, it offers insignificant risk to CEC for award of the INFRACO Contract.

## **5.24 Telewest utility agreement**

#### Purpose of Agreement

The purpose of the Agreement is to set out how the diversion of utilities owned by Telewest are to be managed during the MUDFA works.

#### Current Status of Agreement

The contract has now been signed by Telewest and is with CEC for signature.

#### Risk to INFRACO Contract Award

This is a MUDFA related agreement, and as a result it offers insignificant risk to CEC for award of the INFRACO Contract.

## 5.25 Scottish Power utility agreement

### Purpose of Agreement

The purpose of the Agreement is to set out how the diversion of utilities owned by Scottish Power are to be managed during the MUDFA works.

### Current Status of Agreement

The agreement has now been signed by Scottish Power and tie and is with CEC for signature.

### Risk to INFRACO Contract Award

This is a MUDFA related agreement, and as a result it offers insignificant risk to CEC for award of the INFRACO Contract.

## 5.26 DPOFA 2007 Revision

A negotiation was concluded with Transdev to amend the DPOFA signed in 2004. The process is now complete and the principal agreed changes relate to :

- Improved performance bond underpinning both mobilisation and operating obligations
- Alignment with Infraco contract where previous drafting was based on anticipated Infraco terms
- Scope revised to reflect the Phase 1a / 1b configuration from the originally anticipated Lines 1 and 2
- Revisals to KPI performance regime based on up to date commercial view.
- Replacement of original tram revenue incentive mechanism with a reduced cost recharge, reflecting a fully integrated bus and tram system
- Alignment of insurance arrangements under OCIP
- Obtained tram cost synergy savings with introduction of TEL being responsible for transport integration

## 5.27 Mobilisation agreements (Infraco and Tramco)

The pre-close mobilization agreements with Infraco and Tramco are designed to enable works necessary to maintain programme. The agreements are The Advance Works and Mobilisation Contract ("AWM") and Tram Advance Works Contract ("TAW").

The core of the AWM is that Infraco will perform a schedule of works with payment determined by "Agreed Element Estimates" agreed by the parties in respect of each element of work.

The AWM does not overlap with the Infraco Contract because, when the Infraco Contract is entered into, the AWM automatically terminates. The Infraco Contract therefore deals with payment and other terms relating to advance works underway at that time. The TAW works similarly, in that it ends automatically when the Tram Supply Agreement is entered into.

## (6) Land acquisition arrangements

### Purpose of process

The process of assembling land required for the construction and operation of the Edinburgh Tram Network has been managed using a combination of Compulsory Purchase (using the General Vesting Declaration Procedure), and entering into long term lease arrangements with Network Rail and Edinburgh Airport Limited.

### Current Status of Agreement

By financial close, the position in regard to Land available to INFRACO is as follows:

| Nature Of Land    | Land Area (sqm) | Available to INFRACO | Land Take Achieved | Target Date | No Plots |
|-------------------|-----------------|----------------------|--------------------|-------------|----------|
| Pre GVD           | 498             | Yes                  | 0.1%               | Nov-05      | 3        |
| GVD 1&2           | 177467          | Yes                  | 21.0%              | Feb-07      | 43       |
| GVD 3             | 167854          | Yes                  | 19.9%              | Jul-07      | 22       |
| GVD4              | 43323           | Yes                  | 5.1%               | Sep-07      | 19       |
| GVD5              | 2381            | Yes                  | 0.3%               | Dec-07      | 5        |
| GVD6              | 83588           | Yes                  | 9.9%               | Dec-07      | 17       |
| Licences          | 24885           | Yes                  | 2.9%               | Jan-08      | 14       |
| BAA Licence       | 18388           | Yes                  | 2.2%               | Nov-07      | 17       |
| NR APA            | 42480           | Yes                  | 5.0%               | Feb-08      | 37       |
| Forth Ports (S75) | 80293           | Yes                  | 9.5%               | Mar-08      | 51       |
| Adopted Roads     | 202521          | Yes                  | 24.0%              | Achieved    | 78       |
|                   | 843679          |                      | 100.0%             | Total       | 306      |

Of the total land required, 85.5 % is under the control of CEC through ownership or license, a further 9.5% is committed under Forth Ports existing S75 agreement with the balance of 5% subject to the Network Rail APA agreement which has now been signed.

### Land required but outwith Limits of Deviation

In a number of areas, land is required, mostly for temporary access, which is outwith the LoDs laid down in the Acts. These have been reviewed and can be summarised as follows : it is concluded that there is minimal risk of disruption to the programme.

### Works Outside LOD Summary

| Status of Land   | No. | Risk of Access Problem |
|--|-----|------------------------|
| Within Adopted Road (Covered by Roads & Streetworks Act)                   | 131 | Nil                    |
| CEC Owned Land (Covered by CEC/tie Licence)                                | 55  | Nil                    |
| Forth Ports Land (Agreement for tram land transfer as contribution signed) | 15  | Nil                    |
| Covered by signed Licence or Agreement                                     | 19  | Nil                    |
| Licence proposal agreed as yet unsigned *                                  | 2   | Very Low               |
| More design detail required but Low Risk                                   | 12  | Low                    |
|  | 234 |                        |

The asterisk refers to West Craigs and The Gyle licences which are addressed in Section 5. The residual 12 locations have been specifically addressed and it has been concluded that there is minimal risk of disruption to the programme.

Schedule 31 of the Infraco contract contains drawings which identify the land being made available under the Tram Acts and temporary sites and this has been agreed by BBS.



## **(7) Governance & corporate arrangements**

### **7.1 Governance & delegations**

The Governance model deployed to oversee and control the project has evolved as the project itself has moved through different stages of development. Appendix 2 is a detailed paper which was approved by the Boards on 23<sup>rd</sup> January 2008 and which has been updated to reflect the final position as at Financial Close. The paper sets out :

- 1) the proposed governance model for the construction period ; and
- 2) the proposed levels of delegated authority

The paper is an update of previous submissions to the Boards and differs only in two material respects – the inclusion of specific levels of delegated authority and alignment with the terms of the tie and TEL Operating Agreements (see below). Neither of these factors should cause concern : the levels of delegated authority are in line with those previously deployed by the TPB and the terms of the operating agreements have been subject to significant scrutiny by senior people over recent months.

### **7.2 Operating agreements**

These agreements are now in final agreed form.

#### tie

The tie agreement was previously reviewed by the tie Board in December 2007 and the changes since then are in line with the request made by the tie Board. The tie agreement supercedes the existing agreement on matters relating to the tram project and sets out tie and the Council's mutual responsibilities for delivering the tram project.

#### TEL

The TEL agreement reflects TEL's role but the detailed wording is consistent with the tie agreement. The TEL agreement sets out the specific authority delegated to it by the Council with acknowledgement that TEL will sub-delegate its authority to the TPB.

These internal agreements have been settled, where possible, taking account of DLA Piper's advice to tie and CEC in relation to (i) their acceptability as evidence of agency authority to transact and (ii) their potential adverse impact on the project's strategy towards competition law.

### **7.3 Taxation**

Advice has been taken from PwC on two principle areas :

- 1) The tax effect of the Infracore contract suite structure ; and
- 2) The VAT status of the grant funding

The main objective in tax planning has been to ensure that the arrangements were VAT neutral such that there would be no irrecoverable input VAT and that no unforeseen output VAT would require to be accounted for. We have a formal report from PwC addressed to tie, CEC and TEL confirming this. We have also engaged with HMRC and have a clearance letter from them confirming that the objective is achieved. The contract structure has also been assessed by PwC to ensure that it will be possible in due course to establish a cost base in TEL by either selling or leasing system assets owned by CEC which will create corporation tax shelter in TEL. This could prove very valuable over the operating period of the integrated system.

## **(8 ) Risk assessment of in-process and provisional arrangements**

*This section contributed by Stewart McGarrity, who reviewed those areas of the documents which are provisional in nature and the documents which will be in draft form at Close.*

**THE MATERIAL IN THIS SECTION IS COMMERCIALY CONFIDENTIAL AND FOISA EXEMPT.**

**Additional to the analysis provided in this section is the effect of the final round of negotiations instigated by Bilfinger Berger. The detail behind the final position reached has been documented separately for CEC.**

### ***8.1 Overview***

tie's approach to identifying and managing risks was fully explained in the Final Business Case. This section reviews the current status of the risks relating to the Infraco and Tramco contracts which have been identified as wholly or partly retained by the public sector beyond Financial Close which are:

- The process for granting of approvals and consents;
- The process for granting of permanent TRO's
- The interface with the implementation of utility diversion works
- Delays to design approvals for reasons outside the control of the Infraco
- Stakeholder instructed design changes

Specific areas covered are:

- Price certainty achieved through the Infraco and Tramco contracts with a view on items included in the contract price which will remain provisional at Financial Close
- Specific exclusions from the Infraco contract price
- Responsibility for consents and approvals

And as an area of particular concern to stakeholders:

- The risks associated with significant 3<sup>rd</sup> Party Agreements not concluded in full at Financial Close.

### ***8.2 Price certainty achieved***

The Tramco price agreed at £55m is a fixed sum in pounds sterling for the supply of trams. The overall capital costs estimate for Tramco also includes fixed sums totalling £3.0m for mobilisation costs associated with the maintenance contract and items of equipment for the depot which will be paid prior to the commencement of operations.

The Infraco price of £233.5mm comprises

- £227.0m of firm costs
- less £12.9m of Value Engineering initiatives taken into the price with the agreement of BBS but with qualifications attached
- plus £19.4m of items which remain provisional at Financial Close.

A thorough risk appraisal has been carried out on the deliverability of the Value Engineering initiatives with reference to the qualifications which attach to them. As a result a prudent allowance of £4m has been made against the possibility that for certain items these qualifications will not be removed (of which £2m has been included in the base cost estimate for Infraco and £2m has been included in the overall risk Allowance for the project).

Provisional items comprise a defined list of 22 Items each with a clear process for and programme for resolution. The estimate for each item has been reviewed by tie's technical consultants and by BBS and the risk of understatement is considered to be low. The most significant items are a £6.3m allowance for civil works, including utilities, at Picardy Place as the design for the approved layout is not yet complete. (the cost of the actual tramway, tram stop and associated works at Picardy Place are included in the firm element of the price) ; £3.1m in respect of works which may be carried out on behalf of 3<sup>rd</sup> parties (eg Forth Ports) and which are recoverable from those third parties and a £5.0m allowance for Urban Traffic Control works (traffic lights) associated with the implementation of the project.

The overall capital cost estimate for Infraco includes a further £5.0m, comprising £2.6m for maintenance mobilisation (as for Tramco), and £1m for major spare parts based upon a schedule of prices provided by Infraco and a £1.0m provision for known design changes at the Airport tram stop yet to be included in the Infraco price and £1.4m for other items for which the status or procurement method are yet to be finalised.

### ***8.3 Infraco price basis and exclusions***

The Infraco price is based upon the Employers Requirements which have been in turn subject to thorough quality assurance and the significant areas where post contract alignment of the SDS design will be required. Crucially the price includes for normal design development (through to the completion of the consents and approvals process – see below) meaning the evolution of design to construction stage and excluding changes if design principle shape form and outline specification as per the Employers Requirements. The responsibility for consents and approvals is further considered below.

Significant exclusions from the Infraco price are items not included in the Employers Requirements in respect of (responsibility for securing incremental sources of funding in brackets):

- Additional works at Picardy Place, London Road and York place (CEC)
- Additional works at Bernard Street (CEC)
- Full footway reconstruction in Leith Walk (CEC)
- Additional works in St Andrew Square outwith the tram alignment (CEC)
- Changes within the Forth Ports area (Forth Ports)
- Any other scope required by third parties not already included in the Employers Requirements by virtue of a commitment in an existing agreement

Note that the main works for Picardy Place are included in Infraco as a Provisional Sum.

Full details of all significant such matters have been summarised and reported to CEC. In particular, the cost of tapered OLE poles in the City Centre and Waterfront areas has been provided in the fixed cost.

### ***8.4 Responsibility for consents and approvals***

As previously tie/CEC will retain the risk associated with the process of obtaining TROs and TTROs (some for TTROs post-Service Commencement which are Infraco's responsibility). Full provision has been made in the Risk Allowance for the possible costs associated with a legal challenge to the TRO process which it is not anticipated will include a formal public hearing.

As fully detailed in Appendix 1, for all other required consents and approvals (either design or construction related) the principles which apply are:

1. Infraco (including SDS) will bear any costs and programme consequences associated with design quality and constructability for all consented and/or approved design.

2. in respect of consents and approvals outstanding at Financial Close, tie/CEC will bear any incremental construction programme cost consequences of SDS failure to deliver design outputs in a timely and sufficient manner to the consenting or approving authority insofar as the cost is not recoverable by Infraco from SDS under a capped liquidated damages provision or can otherwise be mitigated by the Infraco.
3. tie/CEC will bear the incremental cost and programme consequences associated with a delay in granting consents or approval having received the required information in a timely and sufficient manner and/or the cost and programme consequences of changes to design principle shape form and outline specification (as per the Employers Requirements) required to obtain the consent or approval.

Taking due cognisance of all mitigations described in Appendix 1, the Risk Allowance (see 8.6 below) includes provisions totalling £3.3m for delays associated with outstanding design work at Financial Close in addition to a £6.7m provision for general programme delay.

To clearly delineate responsibility and therefore risk allocation the Infraco contract and associated schedules, including the SDS Novation Agreement, clearly defines in detail and in a manner agreed by Infraco, SDS and tie/CEC:

- The necessary consents and approvals already obtained at Financial Close
- The remaining consents and approvals and whether the information to obtain such rests with Infraco or SDS
- The expectations with regard to quality of information including compliance with relevant law and regulation
- The programmed dates for delivering information and obtaining the necessary consents and approvals consistent with achieving the overall programme for the project

The role of tie in this complex process is to carefully manage the programme of delivery and take mitigating action as necessary to avoid any cost or programme implications from slippage on individual items. tie also retains responsibility for obtaining specific items including obtaining NR possessions which align with the construction programme agreed with Infraco.

The Risk Allowance does not provide for the cost or programme consequences associated with a wholesale failure of this process – see QRA alignment & Risk Allowance below.

### ***8.5 3<sup>rd</sup> Party Agreements***

There are three groups of residual third party related risks :

- EAL – there is a legal matter to resolve around a future redevelopment of the Airport terminus area. This issue and some contract alignment issues are described in the DLA Report and are not anticipated to create any material risk. .
- NR – a number of mostly programme related risks arising from the NR agreements which are in the normal course of business for doing business with NR. The QRA covers for these in the general delay provision
- Forth Ports - risk that the contribution to extra construction costs of their revised design requirements as capped in their agreement proves to be insufficient to cover the costs. However, tie is comfortable that there will be no material overrun and that the underlying design is sufficiently clear to both parties that future dispute risk is minimal. In the final analysis, resort can be had to imposition of the original design to force an acceptable result.

## ***8.6 QRA and Risk Allowance***

tie's risk identification and management procedures as detailed in the FBC describe a process whereby risks associated with the project which have not been transferred to the private sector are logged in the project Risk Register. Where possible the cost of these risks is quantified by a QRA in terms of a range of possible outcomes, probability of occurrence and thereby the Risk Allowance which is included in the capital cost estimate for the project. The project Risk Register also details the "treatment plans" being followed to mitigate individual risks and thereby avoid all or part of the cost allowance.

As the Infraco and Tramco procurements have progressed tie has maintained and reviewed contractual Risk Allocation Matrices, which reflect the risks retained by the public sector arising from the contracts, and has exercised prudence in ensuring the Risk Register, QRA and therefore Risk allowance provide adequately for risks retained for the public sector including the major areas or risk assessed above.

The only material change in the Risk Allocation Matrices between Preferred Bidder stage and the position at Financial Close is in respect of the construction programme costs associated with any delay by SDS in delivery of remaining design submissions into the consents and approvals process beyond Financial Close.

The Project Control Budget at Financial Close totals £508m (Final Business Case £498m) including a risk allowance of £32m (Final Business Case £49m). This change primarily reflects the closure of procurement stage risks on Infraco and Tramco including all the risks associated with achieving price certainty and risk transfer to the private sector as has been effectively achieved in the Infraco contract as summarised above.

The risk allowance of £32m includes the following provisions for residual risks retained by the public sector during the construction phase of Infraco and Tramco.

- £8.8m in respect of specifically identified risks held by and to be managed by tie during the construction phase including adverse ground conditions, unidentified utilities and the interface with non-tram works and post close alignment of the Infraco proposals with the SDS design.
- £2m in respect of the risk that conditions attaching to the VE items taken into the Infraco price may not be removed
- £3.3m in respect of post Financial Close consents and approvals risks which provides for the cost or programme consequences of imperfections which may arise in elements of the consents and approval risk transfer as described above.
- £6.6m to provide for the cost of minor Infraco / Tramco programme slippage of up to 3 months (other than as a result of delays to MUDFA which is provided for elsewhere in the risk allowance).

tie has assessed these amounts as providing adequately for the residual risk retained by the public sector arising from the Infraco and Tramco works and the post Financial Close consents and approvals process. However the Risk Allowance does not provide for the costs of:

- Significant changes in scope from that defined in the Employers Requirements – whether such changes were to emerge from the consents and approvals process or otherwise
- Significant delays to the programme as a result of the consenting or approving authorities failing to adhere to the agreed programme (Infraco/SDS having met their own obligations) or any other tie/CEC initiated amendment to the construction programme which forms part of the Infraco contract.

All other things being equal any such changes falling into these categories would give rise to an increase in the cost estimate for Phase 1a of the project above of £508m.

## *8.7 Value Engineering Opportunities*

As explained at 10.2 above, the Infraco price is stated after deducting VE opportunities with an aggregate value of £13.8m subject to satisfying certain conditions including the approvability certain items through the consents and approvals proves. A total of £4m have been provided against the possibility that such conditions will not be satisfied. Value Engineering is a continuing process during construction and tie continue to seek to present value for money opportunities to save on construction and project management costs.

## *8.8 Alignment of QRA and Risk Allowance to DLA Letter and Risk Matrices*

tie has considered the DLA Report and appended risk allocation matrices and considers that the Risk Allowance of £32m contained in the projected Control Budget at Financial Close and associated QRA adequately reflects the risks identified and the change in such risks retained by the public sector since approval of the FBC in December 2007. The following references are to specific paragraphs/sections in the DLA letter:

### 5.1 Employers Requirements (ERs) – Alignment issues

There is a well understood and limited level of uncertainty with regard to the alignment of the ERs, the SDS design and the Infraco proposals (on which their price is based). The alignment work described at Section 2.3 above resulted in limited amendment to cost and risk contingencies.

### 5.2 Project Master Programme

The Project Master Programme which forms part of the Infraco contract is now agreed in all material respects. The QRA provides an amount of £6.6m (equivalent to 2-3 months complete delay in the programme) for general delay risk which has been assessed by tie management as adequate for the management of the programme but will not provide for any significant stakeholder initiated change beyond the point of Financial Close. The risk allowance accommodates tie's assessment of the anticipated immediate contractual variation which flows from the final integration of SDS design and construction programmes.

### 6.4 EAL – Option to shift tramway post 1/1/13

The capital cost of any shift in the Tramway at the airport beyond 1/1/13 would be at the expense of BAA and is not therefore a risk which should be provided for in the Phase 1a budget.

### 7.1 Consents – Delay on post-close consents

This is the one significant change in the risk profile retained by the public sector since December 2007. The exact nature of tie/CEC's continuing risks have been well rehearsed and are detailed in Appendix 1 as are the mitigating actions and processes tie has in place to manage these risks. A risk assessment in relation to the QRA is provided at section 8.4 above.

The total risk allowance provided in the QRA in respect of continuing Consents and Approvals Risk is £3.3m. This equates to the cost of some 3 months of BBS standing time and is considered adequate by tie management in the context of the number and criticality of consents still to be delivered, the liquidated damages available to BBS from SDS in the event the delay is caused by SDS, the responsibility of BBS to mitigate the costs of any delay and the close management of the process beyond Financial Close by tie. The risks summarised in the DLA Report are therefore accommodated in the risk and contingency allowance to an acceptable degree. The £6.6m provision noted in section 5.2 above deals with the entire programme moving out by 2-3 months. The £3.3m deals with BBS costs for standing time and other prolongation costs.

## **(9) Update on critical workstreams and readiness for construction**

### **9.1 Design due diligence**

The process and procedures laid out in the design management plan and design assurance process formal design reviews have been undertaken every week since September 2007 to inform and finalise the detailed design submissions. These submissions are then consolidated to form the necessary technical and prior approval packages for CEC to discharge their statutory obligations.

In parallel with the process since August 2007, BBS have had access to the detailed design submission across the range of asset for the Edinburgh Tram Network to enable Infraco's design due diligence to be undertaken. Appendix 1 sets out the status of the design process as at Financial close.

### **9.2 Run-time due diligence**

The Infraco contractor has undertaken modelling based on the updated data provided by SDS and CAF to accept the "laws of physics" runtime as part of the finalised Employer's Requirements.

### **9.3 TTRO / TRO process**

The process for gaining the TRO's for the project is documented in the TRO strategy produced in 2007. A major risk in this respect was removed when the Scottish Government amended the TRO Regulations to remove the need for a mandatory hearing for Tram TRO's. CEC can still elect to hold a hearing if they consider the level of objection to any particular TRO merits such action.

Completion of the TRO's is now driven entirely by design and modelling works being undertaken by SDS and JRC and managed closely by tie. The programme identifies the Orders being made in early 2010 which is in line with the overall construction programme.

### **9.4 MUDFA including interface with INFRACO programme**

The Multi Utilities Diversion Framework Agreement [MUDFA] is currently being progressed to Programme Revision 06 as agreed in November 2007.

This programme has been utilised to integrate with the INFRACO programme and is identified as a constraint in a number of construction items. This has been reflected in the INFRACO Construction Programme with the agreement of BBS and other principal stakeholders as part of the sign up to overall construction methodology. Specific elements of diversions have been transferred to INFRACO where it is required by construction sequencing for the final utilities works.

It is expected that, despite detailed subdivision of works to facilitate BT cabling and commissioning, there will remain some overlapping of work sections as INFRACO commences. It is likely to be restricted to section 1C and 1B and can be managed with INFRACO, BT, AMIS and tie.

Regular reviews of MUDFA progress will be taken with stakeholders to ensure no conflict with Infraco works.

Overall progress on the utilities works has been good in terms of adherence to budget (with no contingency drawdown to date) and to programme. In addition, the public communications process has worked well although it is fully acknowledged that there is a long way to go.

### **9.5 Management team and Handover**

The Tram Project Team to manage the construction phase of the project has now been designed and is substantially populated. Interim arrangements are in place for all key posts where a permanent appointment is awaited. Handover arrangements and detailed documentation of the final contract terms are underway and key procurement phase staff are contracted to remain until this handover is successfully completed.

The Infraco Director and team have commenced detailed works from February 2008 and are already managing and monitoring the Mobilisation Agreements with BBS and CAF. In addition, 3<sup>rd</sup> party facilitation arrangements have been commissioned to accelerate the forming of effective working relationships between BBS and tie.

## 9.6 Safety

Safety management systems are in place. The governance paper at Appendix 3 sets out the overall approach being taken by tie in collaboration with the contractors and stakeholders. Safety management will be under the specific oversight of a tie Board committee chaired by one of the tie non-executive directors who is an experienced industry professional.

## 9.7 Commercial Management

tie have appointed their post-contract award Commercial Director, who commenced work on 7 January 2008. He is currently progressing the remaining recruitment to ensure a competent, fully populated commercial team is in place to manage the INFRACO contract (including novated contracts for SDS & TRAMCO) immediately on Financial Close. Updated commercial processes and procedures have also been established.

## 9.8 Insurance

The project insurance arrangements have been in place for some time under the Owner Controlled Insurance Programme (OCIP) implemented with advice and direction from Heath Lambert. The programme has also been subject to evaluation by the Infraco consortium.

## 9.9 Risk Management

tie's risk identification and management procedures as detailed in the FBC describe a process whereby risks associated with the project which have not been transferred to the private sector are logged in the project Risk Register. Where possible the cost of these risks is quantified by a QRA in terms of a range of possible outcomes, probability of occurrence and thereby the Risk Allowance which is included in the capital cost estimate for the project.

The project Risk Register also details the "treatment plans" being followed to mitigate individual risks and thereby avoid all or part of the cost allowance. There is an agreed risk management procedure currently in operation to manage and treat risks which is owned by tie's risk manager and subject to detailed scrutiny each period with the individual project managers at the period Project Director's Review.

tie and CEC have also agreed an interface to the project where a filter and review is applied to any risks raised by CEC which may be considered relevant as a project risk and requiring a necessary treatment plan.

tie are focused on managing the delivery risks and associated treatment and mitigation plans to avoid or minimise any cost, quality or programme implications.



## **(10) Specific confirmations**

On the basis of the content of this report, the DLA Report and supporting documentation, it is considered that :

- The Infraco Contract Suite is in terms acceptable for commitment ; and in particular
  - The Tramco Novation Agreement is in terms acceptable for commitment
  - The SDS Novation Agreement is in terms acceptable for commitment
- The CEC Financial Guarantee is in terms acceptable for commitment and is aligned in all material respects with the Infraco Contract Suite
- The tie Operating Agreement is in terms acceptable for commitment
- The TEL Operating Agreement is in terms acceptable for commitment

## Background

Negotiations have taken place over a lengthy period of time with the objective of defining a process and set of contractual terms which will enable tie and CEC to manage the risks arising from the overlapping design and construction periods. This problem was not anticipated when the SDS contract was concluded in 2005. The recent discussions have taken place under the umbrella of the SDS Novation Agreement, but it is important to distinguish two groups of issues:

Cost certainty : The primary objective of the novation approach was to ensure that design work could commence long before commitment to the construction contract suite generating maximum construction price certainty and transferring design risk to the construction partner.

Outstanding design risk : SDS have resisted accepting liability to BBS for the timeliness of submission and approval of design packages after Financial Close. Their concern is that the risk is different from (and incremental to) the underlying risk arising from the quality of their work. A delay, they argue, could result in hefty exposure because of the linkage to construction programme delay. SDS did not anticipate this risk when committing to their contract - the expectation was that the majority of design scope and certainly all approvals would be complete prior to Financial Close.

The packages which have been delivered to BBS, with the requisite approvals, by Financial Close (“Approved Packages”) are subject to the Novation terms, which inter alia result in BBS accepting the design quality risk, with resort to SDS in the event of failure under the terms of the existing SDS agreement. The exposure to SDS could be potentially onerous, but was accepted when they entered into the existing contract and is not currently contentious.

This means that the primary objective above of cost certainty and risk transfer has been achieved relative to Approved Packages.

The problem relates to design packages which as at Financial Close are either :

- Submitted for Prior / Technical Approval but not yet approved (“Submitted Packages”) ; or
- Work in progress and not yet submitted (“Outstanding Packages”).

The rest of this paper provides an analysis of the residual risk to tie / CEC arising from these two groups of design packages. The paper does not address so-called “tie Consents” – TROs, TTROs and consents relating to statutory authority to implement the scheme - which have been accepted as out with the responsibility of SDS and BBS, except that BBS (and through them SDS) have an agreed contractual responsibility to assist in the process.

## **Risk overview**

The risks which arise from the overlap of design and construction periods are summarised below :

- A. The Submitted packages are not of requisite standard, preventing CEC from providing consent timeously and creating delay to the construction programme.
- B. The Submitted packages are of requisite standard, but CEC fail to provide consent timeously, creating delay to the construction programme.
- C. SDS fail to provide the Outstanding packages on a timely basis relative to the agreed programme, preventing CEC from providing consent timeously and creating delay to the construction programme.
- D. SDS fail to provide the Outstanding packages to the requisite standard, requiring rework and delay, preventing CEC from providing consent timeously and creating delay to the construction programme.
- E. CEC provide consents and approvals timeously, but SDS then fails to provide IFC ("Issued For Construction") drawings to BBS timeously creating delay to the construction programme.
- F. SDS provide the Outstanding packages on time and to the requisite standard, but CEC fail to provide consent timeously, creating delay to the construction programme.

It is not anticipated that the final Outstanding Packages will be delivered until Autumn 2008. The option of delaying Financial Close to eliminate the risk is therefore unattractive.

SDS has resisted accepting any liability in the event of any of these scenarios. Since the point of investing in a procurement of a design appointment in Autumn 2005 was to secure a completed approvals process with an advanced network design development, there was no allowance for the implications of a coincident design and construction process in the existing SDS agreement. Accordingly, tie / CEC's leverage over SDS on the issue is limited.

BBS have similarly resisted accepting any liability for the consequences of delay arising from the Submitted or Outstanding packages. Their position was reserved (as was Tramlines' position) at preferred bidder, pending due diligence on SDS, as they were aware of the issue at the Preferred Bidder stage, but again we have only limited sanction over them.

There has been no sustained attempt by BBS to sidestep the transfer of design quality risk once the Submitted and Outstanding packages are eventually signed over to them with consent. In fact they have now explicitly accepted the design quality risk as part of the Agreement made on Friday 7 March for Contract Price adjustment. Accordingly, the remaining risk is focussed on construction programme delay as a result of late delivery of design and hence IFC drawings impacting construction.

Resolving this issue has been made more difficult because of concern built up over a long period about the quality and timeliness of SDS's work on the part of tie, CEC and BBS.

There is also a concern that performance against the agreed submission programme could be obfuscated with the intent (or at least result) that design packages fall outwith BBS / SDS responsibility because of claimed failure by CEC. This could happen in four ways:

1. Confusion about submission date if a package is returned by CEC for quality improvement
2. Swamping CEC with a high volume of design packages which cannot be processed within the 8-week period
3. BBS and SDS by some means acting in concert to subvert the process
4. Lack of clarity about the quality of submissions

In summary therefore, tie / CEC are exposed to risks relating to timeliness of submission and / or quality. The risk could be heightened by deliberate or inadvertent actions by BBS / SDS. The next section describes the primary means by which these risks can be contained, through an effective management process controlled by tie / CEC.

## **Development of the design submission and approval management process**

### **Recent process improvements**

The process of managing SDS has not been smooth. The performance of SDS has been consistently disappointing on a number of levels and it is fair to say that weaknesses have also existed in execution by tie and CEC.

More recently, building on the existing Tram and Roads Design Working Groups, a number of important initiatives have been implemented to improve all-round performance. These have together improved both the rate of design production and the quality of those designs.

#### **(1) Co-location of staff**

The co-location of tie, CEC and SDS staff in Citypoint shortened lines of communication and promoted a healthy working relationship that has led to quicker resolution of issues. This has been strengthened further by location of SDS approvals team in Citypoint.

#### **(2) Improved contract management arrangements**

tie has increased the number and calibre of resource devoted to managing the design contract, strengthening both its capability to deal with engineering issues and to manage the overall relationship including commercial management and issues resolution.

#### **(3) Focus on resolution of outstanding design issues**

By instituting the weekly critical issues meeting with attendance from tie, CEC and SDS aimed at clearing critical issues so that they did not hold up design production, tie brought together the relevant individuals, assigned clear responsibility for securing resolution and monitored progress. In recent weeks that has resolved almost all issues that are holding up SDS design and allowed a number of designs that were almost complete to take the critical final step to full completion and submission for approval. This has now evolved to weekly meetings chaired by the tie Executive Chairman to ensure rapid resolution as design progresses to and through the approval process. Actions from this meeting are carried out by a joint CEC, tie, SDS task force.

#### (4) Closing out third party agreements

Many of the outstanding design issues involved reaching final agreement with third parties. Although steady progress had been made with many third parties a small number of third party negotiations were not moving to a satisfactory conclusion. tie devoted additional resources to closing out these issues and worked closely with CEC and SDS to ensure final agreements were reached.

#### Documentation of process and execution

The management process is captured in the Design Management Plan (“DMP”) This, along with the review procedure forms Schedule 14 of the Infraco Contract. In recent months, SDS has had much greater clarity over the reasonable expectations of the approvals bodies. All of SDS’s design packages are clearly defined. A programme has been agreed for the submission of each and the quality of information to be provided with the submissions has been defined. In this context, “quality” relates to an objective assessment of the fitness for purpose of the package, not a subjective assessment of the aesthetic character of the content. A well-defined process of informal consultation prior to submission with relevant CEC people is in effective operation. Once submitted, CEC have an agreed period of 8 weeks to deliver Prior and / or Technical Approval as necessary (“consent”) for each package.

Following novation of SDS to Infraco at Financial Close, tie will continue to use the DMP, working with CEC and InfraCo, to manage the design and consent process and maintain the improved performance in design production and approval. The DMP has been updated to incorporate the role of Infraco in managing SDS following novation but the key principles and initiatives remain in place. This process will be applied to complete the consent process for Submitted and Outstanding Packages as defined above.

Arrangements have been agreed with BBS, SDS and CEC to ensure that all key individuals and constituencies are working very closely together.

CEC’s involvement in the approvals task force ensures that there is timely and effective feedback from the approval body of progress with Submitted Packages. It also allows CEC to raise any issues that need to be resolved before a submission can be made.

Whilst some of the Outstanding Packages lie on the critical path for construction, many do not. This means that there is still some flexibility in the agreed approvals programme. Management of that flexibility lies with tie and CEC and BBS/SDS can only take advantage of the flexibility with tie’s consent.

There will be some changes to the design that SDS submits/has already submitted. Mainly these are necessary refinement of the detail of items where the detailed design will be completed by BBS and these have been allowed for within the programme. Where BBS is proposing an alternative design to that already submitted by SDS, BBS will be responsible for securing approval of that alternative design. In these cases BBS will draw on the experience of SDS to manage that consultation and approval programme.

## Contractual underpinning

The contractual terms which capture these arrangements reflect:

- The contractual responsibility for managing SDS design and development work supporting Submitted and Outstanding Packages sits with BBS;
- BBS are contractually obliged to follow the regime under the Review Process and Design Management Plan, as are SDS;
- SDS agree to liquidated damages to be applied by Infracore regarding late or deficient submissions to CEC;
- Contractual clarity as to primary responsibility for categories of Consents
- Excusable delay in failure to obtain CEC Consent entails evidence of full compliance by SDS/BBS with agreed regime: timing, sequence, quality, notification;
- The absolute nature of SDS contractual responsibility to obtain all Consents has been adjusted to reduce tension surrounding interface with CEC;
- The risk of prolongation cost as a result of SDS failings in terms of causing delay (through not obtaining Consent) is to be taken by tie.
- the risk to programme (and generally) of SDS consented design containing a quality deficiency is ultimately taken by SDS and, in the first instance, by BBS. BBS have now explicitly accepted this as part of the Contract Price. tie will hold a collateral warranty from SDS.

Finally and critically, the overall programme for consents is not only embedded in the SDS Novation agreement to which SDS and BBS are parties, but the programme has been interfaced in detail with the construction programme.

In summary, there is confidence among the tie and CEC managers involved that the management process can be executed rigorously after Financial Close.

## **Focussed risk analysis**

In addition to executing effective management control across all design packages, it is useful to identify those packages which carry the greatest risk. This facilitates prioritisation and mitigation action and also creates a clearer view of the residual risk arising from the overlapping design consent and construction programmes.

On 15<sup>th</sup> February 2008, CEC and tie jointly reviewed the status and risk profile of every Submitted and Outstanding Package relating to Phase 1a, allowing for anticipated progress to Financial Close. The review has been updated through the period to Financial Close, allowing a fresh assessment of risk at both point of Notification of Award and at Financial Close.

The best estimate of progress by end-April will be that 8 Prior Approvals and 7 Technical approvals will have been achieved, making a total of 15 Approved Packages.

The review of the Submitted and Outstanding Packages assessed for each design package seeking Prior and / or Technical Approval :

1. The risk arising from the criticality of the package relative to the construction programme ; and

2. The risk arising from the quality and complexity of the package, which could affect timely consent

A graduated risk measurement was applied to each package for each of the two risk criteria : those packages which were required for the earliest stages of the construction programme having a higher risk rating than those required for later stages ; and more complex or sensitive packages or those with known quality issues were given a higher risk rating than those of a simpler character. The two risk ratings were multiplied together to give a risk rating tabulation across the whole population of Submitted and Outstanding Packages. The tabulation was then stratified into Critical, High, Medium and Low categories based on the risk ratings.

The people who contributed to this process and who have confirmed they are comfortable that the results are properly presented were Susan Clark (tie Programme Director), Andy Conway (CEC Tram Coordinator), Damian Sharp (tie Design Project Manager i/c of the SDS design and approval process), Tom Hickman (tie Programme Manager) and Mark Hamill (tie Risk Manager).

87 individual packages were reviewed, of which 82 were assessed as medium or low risk. The remaining 5 packages in each category were :

| <u>Submitted Packages</u>   | <u>Critical</u> | <u>High</u> |
|-----------------------------|-----------------|-------------|
| Prior Approval              | 0               | 0           |
| Technical Approval          | 0               | 0           |
| <u>Outstanding Packages</u> | <u>Critical</u> | <u>High</u> |
| Prior Approval              | 1               | 2           |
| Technical Approval          | 1               | 1           |

Appendix 1 lists these Critical and High risk packages with a brief summary of their risk profile and the mitigating factors which can be deployed to manage the risk

A report is available which provides a detailed breakdown of the entire population of 87 packages. For each package, the issue is well understood and mitigation plans have been identified to ensure that the risk is being managed on an ongoing basis. Appendix 1 contains full details of these.

In overall terms, the limited number of Critical / High risk packages is no surprise given the short anticipated time to finalise the consent process relative to the overall construction programme and the extent of work done to date to meet the needs of the approval authority.

### Third party approval risk

In addition to approvals by CEC a number of the Submitted and Outstanding Packages also require approval by third parties. The most frequent and significant third party approval body is Network Rail. There has been substantial informal consultation with Network Rail throughout the development of the design and Network Rail has expressed satisfaction with many of the designs in principle. Network Rail has agreed to review Submitted Packages for technical approval in parallel with the CEC consideration of those packages. This means that Network Rail will be in a position to confirm approval very soon after CEC approval is granted. This is a significant concession by Network Rail and reflects their confidence in the design following the consultation to date.

The other significant third party in this context is BAA. Within the EAL Licence, Schedule 3 allows EAL to review tram works data – primarily design & construction related method statements. There is a 30 day review period, and EAL could object to this data, but only on the basis of adverse impact on airport operations or safety. There is also a DRP set out in the licence if an agreed position on design change (both acting reasonably) cannot be resolved.

We are taking EAL through the design and the MUDFA works in a scheduled process of meetings (held 4 weekly, but also in the case of MUDFA, more regularly), there is nothing to suggest that the risk of designs not being accepted is low.

Forth Ports is another player, but the agreement scheduled to be signed with them, and the generally constructive working relationship on these issues, creates a good level of comfort.

No serious issues are anticipated with the other third parties, with whom the approval process is fairly commonplace. Overall, it is considered that the third party arrangements create no material risk to the construction programme.

### **Higher-level mitigations**

In addition to the mitigation arising from control of the well-defined management and approval process and the limited number of Critical / High risk locations, there are a number of higher-level mitigations which are relevant to the overall evaluation.

#### **SDS Liability**

In relation to the Submitted and Approved Packages, one contractual feature of importance in assessing the overall risk is the reward / penalty mechanisms to be applied to keep the design process on track after Financial Close. These mechanisms relate to what can reasonably be defined as SDS's performance. SDS will however accept no liability arising from CEC delay (risks B and F above). The effect of these arrangements has been incorporated into the assessment of risk contingency described below.

A general legal protection exists whereby SDS is exposed to claims from BBS following novation for "culpable failure" which could supersede the cap.

#### **Funding support**

Any uncapped exposure will carry no financial protection to tie / CEC. However, should this result in increased project cost, assuming legitimately incurred, the terms of the grant funding from Transport Scotland mean that the cost will be substantially covered by grant, to the extent that there remains headroom beneath the aggregate funding of £545m. It must be borne in mind that this factor cushions risk to tie / CEC but not to the project as a whole.

#### **Existing risk contingency**

The project cost contains risk contingency amounting to £3.3m linked to the consent risks described in this paper.



## Conclusion

The overlap of continuing design and approval processes with the construction programme has created a risk. Experience in the early years of managing the design and approval process was not happy, but recent initiatives have successfully developed a well-defined and effective management process, led and directed by tie / CEC. This management process will continue following Financial Close with minimum risk of interference.

A thorough risk-focussed review of the consents has been performed by competent people from tie and CEC. This has concluded that the residual risk is contained in a small number of design packages. These have been the subject of prioritisation to mitigate their risk profile.

The combination of controlling the management process and focus on the key elements of the residual risk, constitute an effective risk mitigation framework. There are other higher-level mitigations which provide further help, notably the funding arrangements and the existence of a risk contingency in the project budget.

It is the view of the tie and CEC project team that these factors can be relied upon to manage the exposure successfully.

## Prior & Technical Approvals

## APPENDIX 1

| Critical Risks >21    | Description               | Risk | Issue   | Mitigations  |
|-----------------------|---------------------------|------|---|--|
| Technical Outstanding | A8 underpass              | 25   | Underpass – sewer conflict                                  | Technical solution now agreed and requires sewer to be diverted                                    |
| Prior Outstanding     | Haymarket                 | 25   | Prior approval for this batch has been problematic          | Revised submission made and CEC will aim to approve as soon as possible                            |
| High Risks 11 - 20    |                           | Risk | Issue   | Mitigations  |
| Technical Outstanding | Section 6 Drainage        | 15   | VE solution changes design                                  | SDS are reducing the time taken to make final comments on board and complete IFC drawings          |
| Prior Outstanding     | Russell Road Bridge       | 20   |   | CEC will provide prior approval in time for piling works to commence                               |
| Prior Outstanding     | Murrayfield Stadium batch | 15   | Batch has been on hold pending decision on Roseburn Viaduct | Batch now taken off hold. CEC advised that revised Roseburn viaduct solution will be re-submitted. |

Paper to : tie Board, Tram Project Board, TEL Board, CEC  
 Subject : Project Governance after Financial Close  
 Date : UPDATED 7th April 2008

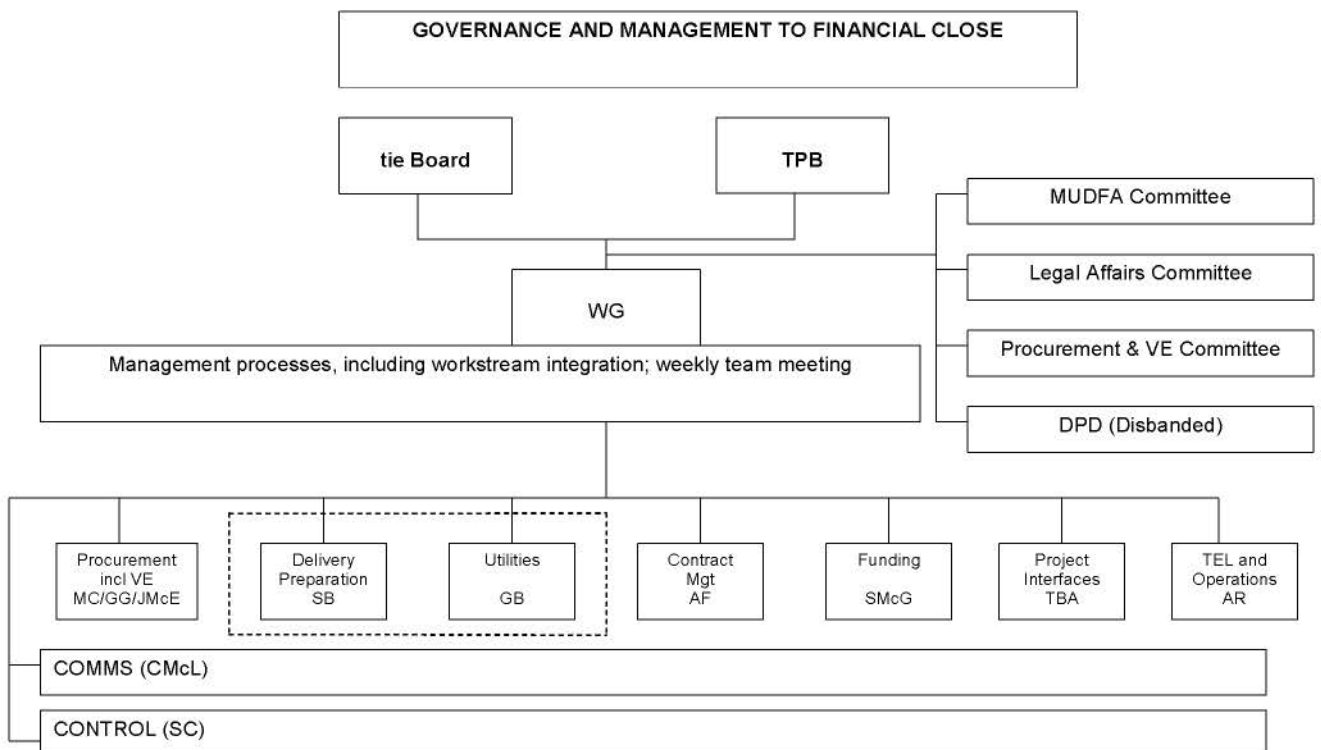
**THIS PAPER SUMMARISES THE PROPOSED GOVERNANCE AND MANAGEMENT MODEL AS IT STANDS AT 7th APRIL 2008. THE AREAS WHICH HAVE NOW BEEN UPDATED INCLUDE FINALISATION OF OPERATING AGREEMENTS AND THE DELEGATED AUTHORITY WHICH FLOWS FROM THOSE AGREEMENTS. THIS PAPER IS THE FINAL FORM SUPPORTING FINANCIAL CLOSE**

**Edinburgh’s integrated transport system  
 Project governance for the construction period**

**(1) Governance and management model in period to financial close**

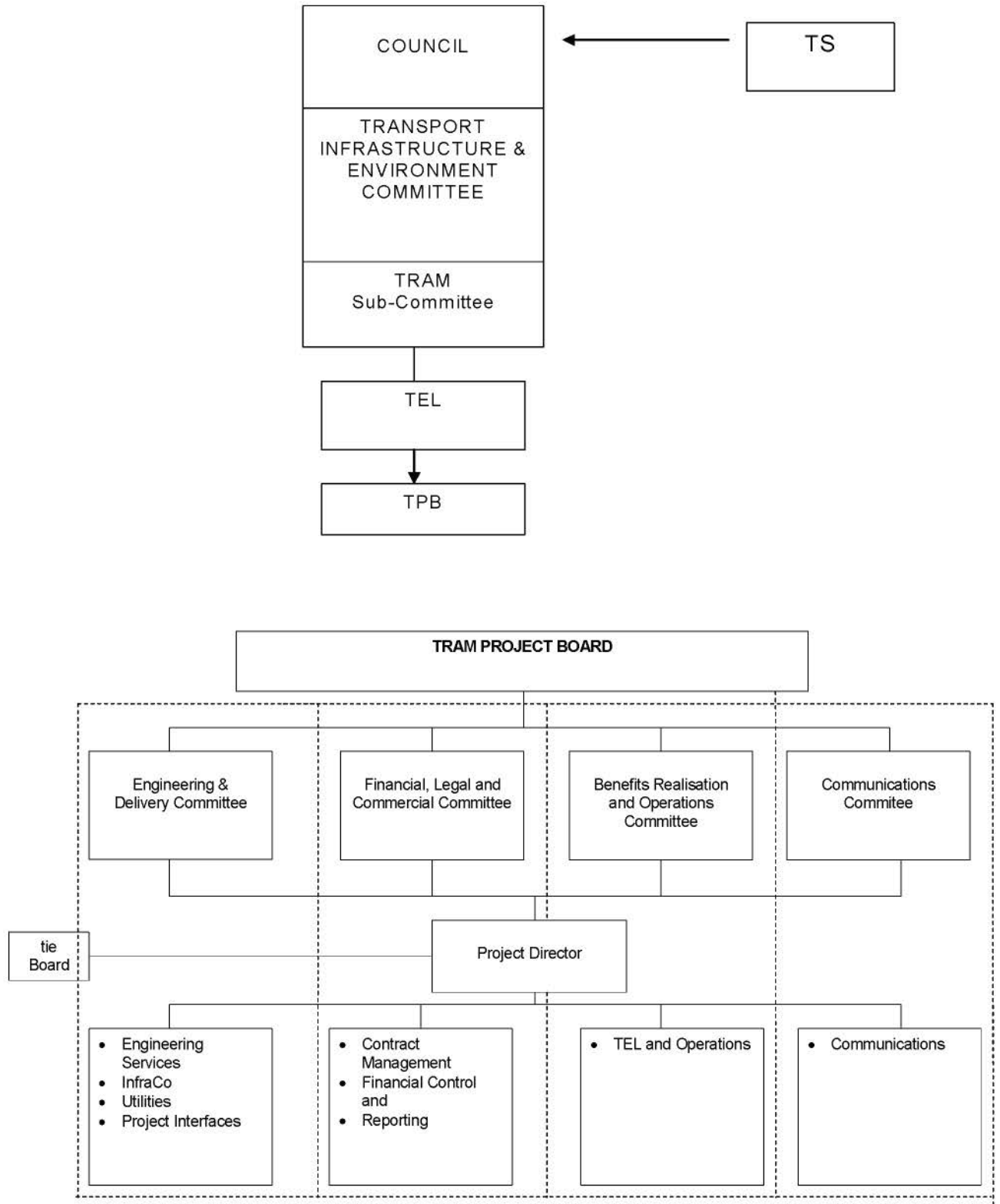
The recipients of this paper approved a governance and project management model for the period to Financial Close prior to the Council’s meeting on 25 October 2007. The purpose of this paper is to present the proposed model for the period from Financial Close to operational commencement, planned for Q2 2011. The proposed model is very similar to the outline presented in October but this paper is drafted to be independent of previous submissions.

The current model is set out in the following diagram, including the project workstream structure under the TPD.



**(2) Governance and management model in construction period**

The diagram below sets out the proposed governance model for the construction period .



The roles & responsibilities of the entities within the new governance and management model are summarised below.

### Transport Scotland (TS)

TS exercise their oversight of the project through 4-weekly reporting in prescribed format and a 4-weekly meeting with the City of Edinburgh Council (CEC).

The principal contractual relationship between TS and CEC is the Grant Award Letter which sets out the terms on which TS will provide the balance of the £500m grant. This contains detailed reporting and certification requirements appropriate to the conduct and scale of the project..

### CEC

CEC have established a "Tram sub-Committee" of the existing Transport, Infrastructure and Environment Committee. The sub-Committee is chaired by the Executive Member for Transport with a 6-8 weekly meeting cycle. The purpose of the sub-Committee is to review and oversee decisions with respect to the project. This will include addressing matters directly affecting the Council and providing assurance that matters which cross Council departmental boundaries are managed cohesively (for example, responsibilities for roads & traffic management and budgets).

CEC have prepared Operating Agreements between the Council and respectively tie Limited and Transport Edinburgh Limited (TEL) to codify the arrangements between the entities and the responsibilities of the two subsidiaries. The signing of the Operating Agreements creates the authority for tie and TEL to execute their responsibilities.

The Council Report approved on 20 December 2007 indicated that some issues will require to be referred to Council including the approval of the annual business plans for tie and TEL respectively and significant changes to Council obligations including material changes to scope and cost within the Tram Project, will also be reserved to Council. Full Council will also require to ratify settlement of any claims greater than £500k or £1million in a 12 month period. The precise definition of the delegated interface between the full Council and its committees is a matter for the Council.

The Operating Agreements also specify certain matters which require the approval of a Council Monitoring Officer. The Monitoring Officer will be the same individual with respect to both tie and TEL and will also be a member of the TPB, in order to ensure that the governance structure is clear and singular.

### TEL

The TEL Board is focussed on its overall responsibility to deliver an integrated tram and bus network for Edinburgh, on behalf of CEC. The Board is responsible for compliance with its Operating Agreement and it will also address any matters outwith the direct arena of Integrated Bus and Tram systems and any statutory TEL considerations.

The TEL Board comprises an independent non-executive Chairman, independent non-executive directors, Elected Members and Executive management. There is appropriate common membership across the TEL, tie and LB Boards to ensure consistency of approach.

The following matters will be a matter for the TEL Board to determine :

All matters affecting the programme, cost and scope of the Project except the following which are matters reserved to the Council:

- (A) (i) any actual or reasonably expected delay to the Project programme of greater than 3 months; or (ii) any actual or reasonably expected increase in cost of over £10m; relative respectively to the programme leading to commencement of revenue service by 31 July 2011 and capital cost of £512m (Phase 1A) or £87m (Phase 1B) as set out in the Final Business Case or as subsequently approved by the Council prior to commitment by tie to the Infraco Contract ; or (iii) notwithstanding the terms of (i) and (ii) above, any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis); or (iv) any substantial change to the design, scope or service pattern set out in the Final Business Case; and
- (B) the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000;

TEL may delegate responsibility for all matters other than those specified at A and B above to the TPB and the TPB may in turn delegate responsibility for all other matters to tie, but only to the extent that such delegation is already within the remit of tie in the context of the tie Operating Agreement. TEL agrees that it shall retain ultimate responsibility for all matters it so delegates.

The Council's majority shareholding in Lothian Buses (LB) will be transferred to TEL and parallel changes to the composition of the Lothian Buses Board will be effected in due course.

#### Tram Project Board (TPB) and its sub-Committees

The TPB maintains its role as the pivotal oversight body in the governance structure. The TPB is established as a formal sub-Committee of the TEL Board with full delegated authority to execute the project in line with the proposed remit set out in Appendix 1. In summary, the TPB has full delegated authority to take the actions needed to deliver the project to the agreed standards of cost, programme and quality within the authority delegated to the TEL Board.

The suggested membership of the TPB is 7 people (Office of Government Commerce constituency definitions "highlighted"):

- Chair (David Mackay)
- Senior CEC Representatives - "Senior User Representatives" (Donald McGougan and Andrew Holmes)
- TEL CEO and Project "Senior Responsible Owner" (Neil Renilson)
- "Senior Supplier" representatives (tie Executive Chairman and TEL Operations Director) (Willie Gallagher and Bill Campbell)
- Executive Member for Transport (Phil Wheeler)

The Chair will continue to be the TEL Non-executive Chairman, rather than the Project SRO. Other parties, principally senior project management and advisers, will be called to attend as required, though it is anticipated that a common group of senior project directors will attend

The remit and delegated authority given by TEL to the TPB, and by the TPB to the SRO and Tram Project Director (TPD) are set out in Appendix 1. The TPD will formalise delegated authority downwards to senior members of the delivery team.

## tie Limited

tie's role is to deliver the tram network fit for operational purpose, on time and budget. For the foreseeable future, tie will have only one major project, the tram. It will maintain roles with certain smaller projects and will require to comply with normal statutory responsibilities as a limited company, including formal compliance with its Operating Agreement.

The tie Board presently comprises a group of independent non-executive directors and Elected Members under the Executive Chairman. The Elected Members will be the same on each of the TEL and tie Boards to ensure consistency of view across delivery of the system and operations. The independent non-executive members will also provide experienced participation in the TPB's sub-committee deliberations, as explained below.

In overall terms, the composition of the tie Board will be maintained in its present form. The Board will maintain its Audit and Remuneration committees, membership of which are restricted to the NXDs. In addition, a new tie Board sub-Committee will be established to address Health & Safety, chaired by an experienced NXD.

In its role on the tram project, tie provides services to the TPB. The tie Operating Agreement provides tie with the legal authority to enter into all competent contracts to deliver the tram system. The tie Board will delegate authority to its Executive Chairman to execute its contractual responsibilities for the tram project. The Tram Project Director (a tie employee) is given delegated authority by the tie Executive Chairman to manage and deliver the project. The authority given to the TPD in his role as a tie employee is synchronised with the authority delegated to him by the TPB. This ensures that the TPD leads the project delivery under delegated authority from his employer (tie) and from the project client (TEL through the TPB) which is consistently defined.

Further changes to the composition of the TEL, tie and LB Boards will be effected as is deemed necessary over the period ahead. In particular, in the event that tie assumes responsibility for additional major projects in the future, the Board composition may need to be addressed. All such changes will require the formal approval of the Council.

In summary, the roles of the parties are :

### CEC

- To be responsible for the creation of a financially viable integrated bus and tram system in line with the approved Business Case ;
- Compliance with the terms of the Grant Award Letter

### TEL

- Under authority delegated by its parent CEC, to prepare for the operation of the integrated tram and bus network, including oversight of the delivery of the tram infrastructure executed through its sub-Committee, the TPB ;
- Compliance with the CEC / TEL Operating Agreement ;
- Statutory responsibilities including Board membership, statutory reporting, maintenance of books of account and statutory records ;
- Matters relating to TEL employees including Health & Safety

### TPB

- Prepare for the operation of the integrated tram and bus network, including oversight of the delivery of the tram infrastructure, conducted directly or through scrutiny by sub-committees of the TPB of specific activities within the project

tie

- Management of the delivery of the tram infrastructure including management of the contracts written with third parties to achieve delivery of the tram network fit for operational purpose, on time and budget
- Compliance with the CEC / tie Operating Agreement ;
- Statutory responsibilities including Board membership, statutory reporting, maintenance of books of account and statutory records ;
- Matters relating to tie employees including Health & Safety

TS

- To provide grant funding in line with the terms of the Grant Award Letter

### (3) Practical operation of the governance model

It is recognised that there is inevitable duplication between the scrutiny by the tie Board of its Executive activities and the oversight role performed by TEL and the TPB. However, this situation is normal, if tie's role of providing a service to its client, in this case TEL, is borne in mind.

It is suggested that the tie and TEL Boards will meet every second period on a period-about basis. The frequency of TEL Board meetings is expected to increase as operational commencement approaches. The TPB and its sub-committees will operate on a 4-weekly cycle, linked to the 4-weekly report to TS. The means by which the Project Director arranges day to day management of the project is not reflected in this paper but will also follow the 4-weekly cycle and will respond to the reporting requirements of the tie and TEL Boards.

The outstanding matters required to finalise the calendar following Financial Close are :

- Dates for proposed CEC Tram sub-committee meeting
- Dates for 4-weekly TS / CEC meetings

The current TPB sub-Committee structure will be dissolved and the new sub-Committee structure will comprise :

#### Engineering & Delivery Committee (E&D)

- Delivery under contracts - Infraco, Tramco, Utilities / MUDFA, design,
- Health & Safety, Quality & Environment
- Improvement initiatives – VE, Innovation, ICT
- Project interfaces & approvals – Land & Property, Traffic, third parties

#### Financial, Commercial & Legal Committee (FCL)

- Financial management – reporting, control, audit, risk management, insurance
- Contract management – reporting, compliance, interface with delivery, claims & variations

#### Benefits Realisation & Operations Committee (BRO)

- Operational & integration planning
- O&M contract planning
- Transdev
- Marketing

#### Communications Committee

- Comms management – utilities / MUDFA, Construction, Media, stakeholders

It is anticipated that the BRO and Communications committees will not meet for the early period of construction in the absence of any material issues arising which require separate scrutiny. The TPB will deal directly with any relevant matters under these headings for the foreseeable future.

In order to create close cohesiveness between the TPB / sub-Committee governance model and the project management structure, the sub-Committees will be directly interfaced with the Project workstreams and the individual directors responsible. Appendix 2 sets out the interfaces which effectively constitute the remits for these committees.

To further reinforce cohesion, the tie Executive Chairman will Chair each of the sub-Committees. The attendance of senior project and client officers, and the clear responsibilities allocated to individual Project Directors, will ensure that appropriate independence and challenge is achieved. As currently, the sub-Committees will have clear remits and will focus on detailed interrogation of key issues, leading to recommendations to the TPB which retains decision-making authority over all key areas.

#### (4) Health & Safety

A detailed analysis of the means by which H&S responsibilities are discharged is set out in Appendix 2. In summary, H&S is clearly of paramount importance both currently and in the construction phase of the Project. CDM 2007 will be a key focus and will be given appropriate prioritisation by all parties at all levels. The application of legal H&S responsibilities in the context of the governance and management of a large, complex project requires very careful analysis.

**The detailed definition, allocation and communication of responsibilities will be executed as part of the readiness process in advance of construction commencement.**

#### (5) Approvals requested from recipients of this document – tie Board, TPB, TEL Board and CEC in appropriate sessions

The following approvals have been completed :

1. Approval of the proposed governance model for the period from financial close to operational commencement.
2. Approval of the tie and TEL Operating Agreements and all related delegated authorities
3. Confirmation of the proposed members and participants in the governance bodies
4. Confirmation of the proposed meeting cycle
5. Approval of the proposed H&S regime.

GB

07.04.08 [Authority levels amended in line with final form of Operating Agreement]



## Appendix 1 to Governance Paper - Tram Project Board (“TPB”) Remit

TPB has delegated responsibility for the delivery of an integrated Edinburgh Tram and Bus Network on behalf of TEL and CEC, in particular :

1. To oversee the execution of all matters relevant to the delivery of an integrated Edinburgh Tram and Bus Network, with the following delegations :
  - a. Changes above the following thresholds
    - i. Delays to key milestones of > 1 month
    - ii. Increases in capital cost of > £1m
    - iii. Adversely affects annual operational surplus by >£100k
    - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of > 0.1
  - b. Changes to project design which significantly and adversely affect prospective service quality, physical presentation or have material impact on other aspects of activity in the city
  - c. Delegate authority for execution of changes to TEL CEO (the Project SRO) with a cumulative impact as follows:
    - i. Delays to key milestones of up to 1 month
    - ii. Increases in capital cost of up to £1m
    - iii. Adversely affects annual operational surplus by <£100k pa
    - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of <0.1

[Note: these are cumulative impacts since the last position approved by the TPB.]

The TEL CEO will delegate similar authority to the Tram Project Director.

These levels of authority apply to all matters affecting the programme, cost and scope of the Project except the following which are matters reserved to the Council:

- (A) (i) any actual or reasonably expected delay to the Project programme of greater than 3 months; or (ii) any **actual or reasonably expected increase in cost** of over £10m; relative respectively to the programme leading to commencement of revenue service by 31 July 2011 and capital cost of £512m (Phase 1Aa) or £87m (Phase 1Bb) as set out in the Final Business Case or as subsequently approved by the Council prior to commitment by tie to the Infraco contract ; or (iii) notwithstanding the terms of (i) and (ii) above, any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis); or (iv) any substantial change to the design, scope or service pattern set out in the Final Business Case; and
- (B) the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000;

All matters which fall to the determination of the TPB will be reported to the TEL Board on a comprehensive and timely basis.

Matters which do not fall within the TPB and TEL Board’s delegated authority levels described above will require determination by the Tram Sub-Committee of the Council.

2. To appoint the Senior Responsible Owner (SRO) and Tram Project Director (TPD) for the project and to receive reports from the SRO and TPD on project progress

3. To receive reports from sub-committees established to oversee specific areas, as approved by the TPB
4. To ensure project workstreams are executed according to robust programmes under the leadership of Project Director.
5. To approve the submission of funding requests and to recommend approval of funding terms to the TEL Board. TPB will also confirm to CEC compliance with all relevant aspects of the grant award letter.
6. To ensure proper reporting through the TPB Chairman to the TEL Board and to CEC (as appropriate) of decisions made.



## Appendix 3 to Governance Paper Health & Safety background and proposed operational structure

### *General*

H&S obligations are well-understood and entrenched in the project governance and management structure. The increased level of physical activity which may give rise to H&S risks once construction commences reinforces the need to ensure H&S responsibilities are clear and that the highest standards of H&S management are applied. These considerations must be addressed on a daily basis in all actions and at all levels by parties involved in Project.

In overall terms, the key H&S considerations for CEC, TEL, the TPB and tie are:

- the health & safety of their people - the corporate H&S Management Systems address this responsibility
- ensuring that CEC, TEL, the TPB and tie deliver against clearly stated H&S responsibilities in the framework of the project including working alongside third party H&S management systems
- monitoring and reporting regularly that these responsibilities are being properly discharged
- ensuring that all persons employed by CEC, TEL and tie are competent
- ensuring that contracts entered into address H&S issues adequately
- ensuring that H&S ramifications are considered when key investments and business decisions are made

These H&S considerations apply currently, throughout the period to Financial Close and throughout the period of construction and into operation of the tram system. The H&S responsibilities are currently defined clearly to meet the demands of the current project activity including the utility works now underway. These responsibilities will require to be revised to integrate with the revised governance structure described in this paper and to enable effective management of the full-scale construction activity which will follow Financial close. The narrative below provides a description of the responsibilities of the bodies involved in the project and has been drafted with the full involvement of DLA. A precise and legally supported H&S regime will be put forward for approval and then implemented in advance of financial close.

### *Relationship of revised governance model to H&S responsibilities*

The TPB creates an "inclusive" decision making process which is important for the effective operation of the project. The TPB will be a formal sub-Committee of the TEL Board so that members of the TEL Board on the sub-Committee retain the formal responsibility for decisions taken at the TPB, with all other parties to TPB deliberations being participants or observers only. The TPB itself is not a shelter from health and safety liabilities or a clearing house for liabilities. Legally CEC, TEL and tie cannot delegate H&S responsibility to the TPB in the governance structure and thereby declare that they have discharged their health and safety liabilities and have no further duty regarding input into or consideration of health and safety issues.

The ultimate responsibilities for the TPB decisions flow up to the TEL Board and CEC, subject to the intended election under the Construction Design and Management Regulations 2007 ("CDM 2007") of tie as "Client" under those regulations. A Procurator Fiscal may consider that all parties (CEC, TEL and tie), together constitute the entity for the discharge of H&S obligations. As a result H&S implications must be considered by all these parties when making significant decisions affecting design and implementation through the construction phase of the Project. The HSC guidance *Director's Responsibilities for Health & Safety* must be followed by CEC, TEL, the TPB and tie. Appropriate leadership should be demonstrated in this area by the boards and senior management.

Where changes are submitted for TPB approval, or are requested by the TPB, tie/TEL/CEC (and the appointed CDM 2007 parties) will be legally responsible for identifying and managing any impact that these changes will have on safety. The TPB will be responsible for ensuring that they understand and have responsibility for any decisions made in this respect. It is intended that tie will be mainly responsible for implementing the decisions made throughout the construction period.

It is considered that TEL/CEC would remain the "client" in terms" of CDM 2007 as the TPB is not a separate legal entity although it will make decisions on behalf of TEL/CEC. tie is responsible as the elected second client under CDM 2007 and the client/employer (for general health & safety regulations) for the overall project safety management for the development and implementation of the Project. Such an election is, however, not a full delegation of all rights and responsibilities. tie and the TPB must ensure that its activities or its stakeholders or advisors do not undertake actions that encroach upon the role of the designer under CDM 2007, because this would mean that they would require to demonstrate competency in this role and fulfil added responsibilities.

The revised project governance structure described in this paper will distance Transport Scotland from the H&S responsibilities as their responsibilities are related to those of the principal funder of the project, in the absence of any material involvement in design or construction matters.

Health & Safety, Quality & Environment will form an element of one of the new TPB governance sub-Committees. H&S matters within tie will be the responsibility of the Engineering and Delivery Director. In addition to the E&D Director's leadership on this issue, a senior NXD will be the nominated chair of the H&SQE sub-committee of the tie Board to add a further H&S check in the operation of tie and the TPB.

A regular safety report is produced and presented to the tie Board and to the TPB each month. The TPB will ensure that safety is a core agenda item for each meeting and will ensure that the safety report tabled at each meeting is actioned where appropriate. Copies of these reports, or summary documents as appropriate, will be disseminated to TEL and CEC. This will ensure that H&S issues are considered at senior level on a regular and disciplined basis.

#### *Legal backdrop*

There may be occasions where a decision which is made by the TPB under its delegated authority from TEL is driven by one of the stakeholder directors to the exclusion of the other members of the board. In the event of an incident, this may result in the contractual relationships or duties between the stakeholders being considered. Notwithstanding that financial indemnities could be put in place to cover losses suffered, if a particular party declares that it will be held accountable for a decision impacting safety, it is important to highlight that it is not possible to ensure that fines imposed as a result of prosecution can be the subject of an enforceable indemnity. It is not possible to contract out of criminal liability nor is it possible to insure against a fine. Although it may be competent to include a clause in a contract, it is possible that such a clause would be construed by the courts as unenforceable and contrary to public policy. In this context, the representative of each stakeholder would need to look to their employer, with regard to personal accountability.

The creation of appropriate safety responsibility structures, safety management systems and culture will form a key defence to any prosecution assuming all procedures have been followed. Clearly there could also be a number of other parties involved in a safety incident, for example contractors, sub-contractors, agency staff, designers, CDM- Coordinators and third parties.

The Corporate Manslaughter and Corporate Homicide Act 2007 came into force on 6 April 2008. Corporate homicide will be committed where a death is caused by an unlawful or grossly negligent act of the senior management of an organisation. The management and organisation of activities by senior management must constitute a "substantial element" of the breach, in other words, partial delegation of the duty will not prevent liability attaching to senior management. Breach is punishable by a fine. Although directors do not face personal liability under the Act, the offence will make directors more vulnerable to disciplinary action and further crystallise their accountability for health and safety compliance to their stakeholders. It remains possible for directors and senior management to face personal liability if there is sufficient evidence to bring a prosecution under the existing common law or under the Health & Safety at Work etc Act 1974.

Edinburgh Tram Network

Contract Execution Suite

- the Infraco Contract (and Schedule Parts 1 to 44);
- the Tram Supply Agreement (and Schedules 1 to 23) and the Tram Supply Novation Agreement;
- the Tram Maintenance Agreement (and Schedules 1 to 24) and the Tram Maintenance Novation Agreement;
- the SDS Novation Agreement and its Annexes 1 to 7;
- the CEC Guarantee
- the tie-CEC Operating Agreement.

Source : DLA